

## **LOGISTICS SOLUTIONS AS A MEANS TO JOB CREATION AND ECONOMIC DEVELOPMENT** The need to create jobs in North America requires a rethink of traditional logistics ideas and applications to capitalize on the needs of the New World Economy.

By Franco Eleuteri

### **The Evolution of Logistics**

Initial logistics applications in North America during the eighties, focused on the need to improve the management of inventory, while introducing just in time concepts. This had the goal of improving the efficiency of local manufacturing and distribution operations and was driven by the need to compete with imports from countries such as Japan.

This objective was complemented by efforts towards increased efficiency by the use of automation, as a means to reduce labor costs, together with the use of computerized systems which addressed the planning, manufacturing and distribution functions.

Subsequently a trend towards the outsourcing of product offshore, motivated the need to manage the procurement and fulfillment process on a global basis. This resulted in the evolution of multimodal (sea-air-land) logistics capabilities, where goods are moved using multiple modes, as part of an integrated transportation process.

A more recent focus is the use of logistics driven solutions as a means to create jobs in North America. This requires an understanding of logistics and in particular the Global Supply Chain, together with the complexities resulting from the different levels of service and the cost drivers of individual market sectors.

### **Characteristics of the Global Supply Chain**

The Global Supply Chain incorporates a complex network, which joins together the sources of materials, manufacturing locations, distribution facilities and transportation nodes or hubs. This provides the capability to move product to the end user both at the right time and at the right price. This has evolved into the manufacture of goods and components on a global basis, where parts and components commonly move from different locations to a final assembly or customization point, before they reach the end user.

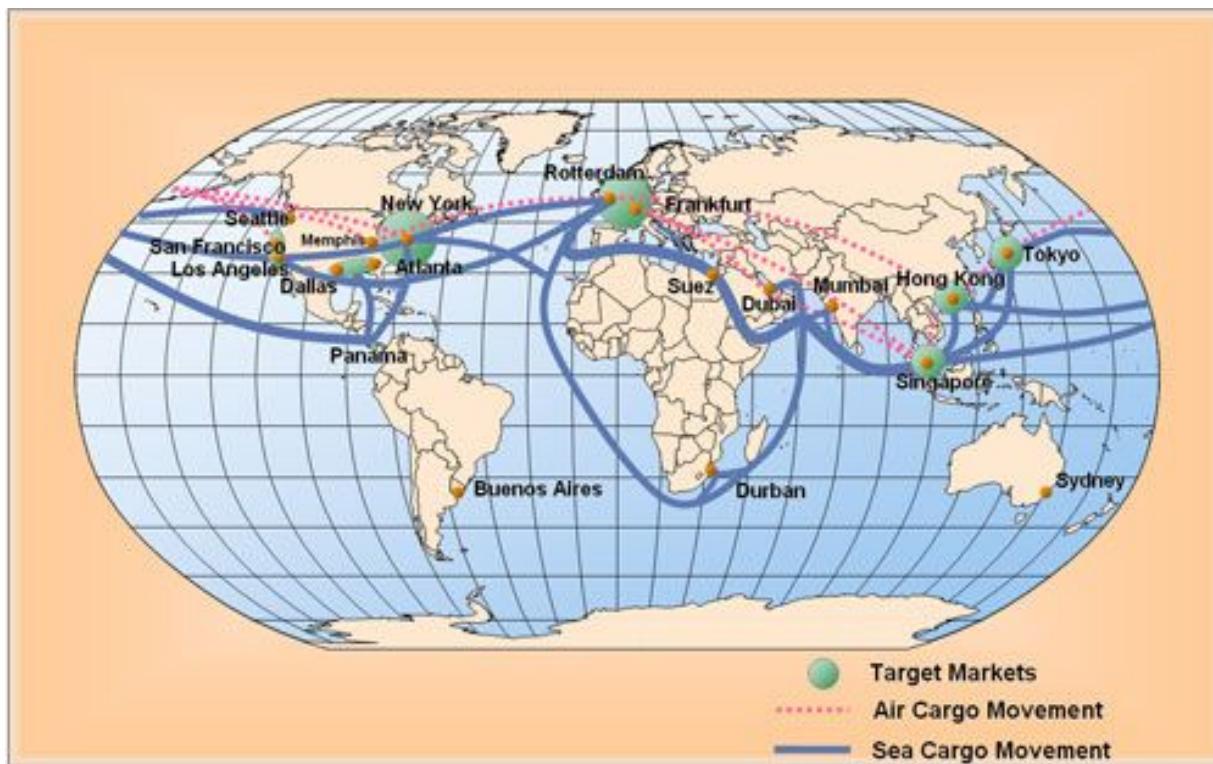
In addition this has required a focus on new manufacturing and logistics techniques with the objective of reduced inventories , the ability to manufacture to order, and the agility to respond to market needs.

Traditional concepts of vertically integrated plants focused on mass production have therefore been replaced by such concepts as:

- *postponed manufacturing as number of multiple steps, which are performed at different locations, while creating a manufacture to order capability.*
- *the use of value added logistics centers, where final customization of the product is performed in proximity to the market, enabling final delivery to the end user on an expedited basis.*
- *the ability to develop new products or systems and bring them to market in the shortest possible time, commencing with the research activity which is aimed at meeting new market opportunities.*
- *the recognition that both order taking and the fulfillment functions are integral to the success of the Supply Chain incorporating both office and manufacturing- distribution environments.*

Furthermore, the role of the transportation hub or port has been rethought with the creation of logistics platforms able to undertake value added services, which include time sensitive manufacturing and customization functions.

## Target Markets and Global Transportation Routes



### The Development of Value Added Logistics Platforms

In order to utilize the Global Supply Chain as a means towards job creation and economic development has resulted in new initiatives. These aim at the redevelopment of the existing transportation infrastructure, while seeking to incorporate value added logistics activities. This has the objective of capturing both order taking and fulfillment functions in the movement of goods to the end user.

A particular focus has been on the creation of Special Economic, Industrial Development and Free Trade Zones adjoining a major port or airport, with the objective of attracting both manufacturing and logistics operations.

Examples of such port related initiatives include:

- Rotterdam with its distriparks, which create the environment for international logistics operations, connected to both the adjoining port and airport
- Dubai with the Jebel Ali Free Zone of 100 square kilometers, which focuses on manufacturing and distribution as part of a self contained environment
- The Navi Mumbai SEZ (Special Economic Zone) creating a unique location for the establishment of export focused activities.

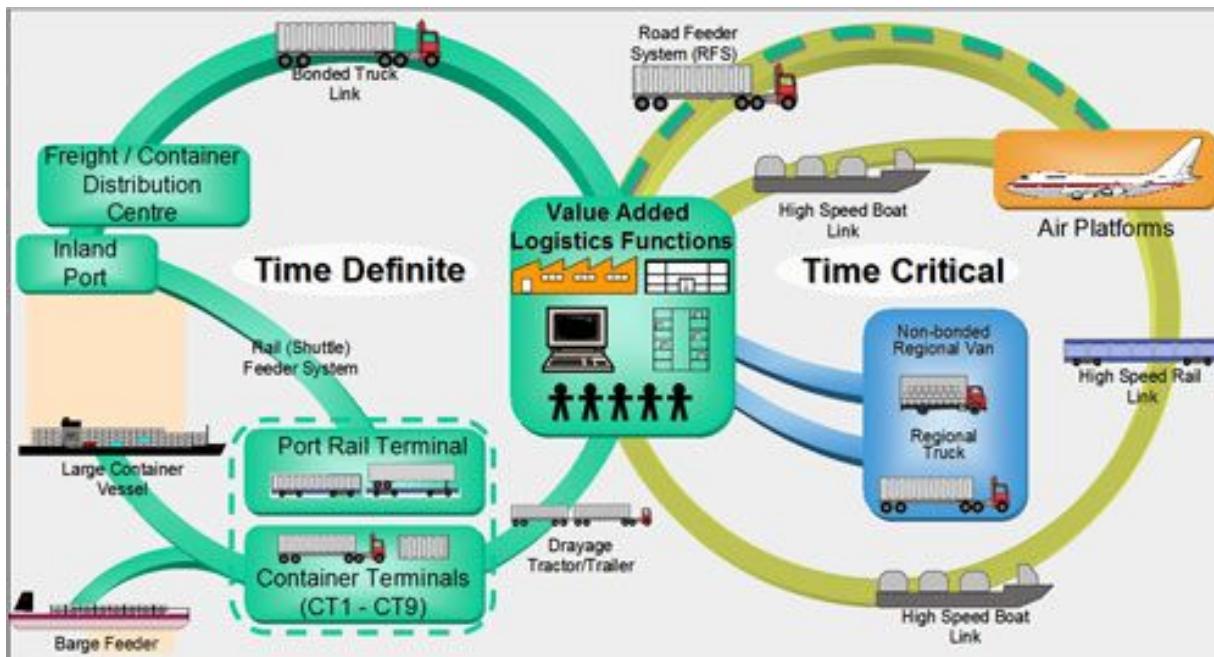
In a like manner airport related initiatives have evolved, which provide a value added multimodal logistics capability. These include:

- The Alliance Development north of Fort Worth , as a successful multifunctional private sector project, with an overall master planned area of 15,000 acres including a freight airport
- The Vatry International Airport about 150 km from Paris as a multimodal (air, road, rail) logistics hub and industrial park of about 2,200 hectares
- The Subic-Clark Development (SCAD) which capitalizes on the port and airport infrastructure at Subic and Clark in the Philippines .

Each one of the above mentioned initiatives provides its own unique solutions to addressing its specific market needs.

However, In order to successfully utilize such concepts in North America as a means to create local jobs, requires each location to develop and implement its own specific competitive strategy.

### **Integrated Sourcing Processing and Transportation**



### **The North American Environment**

North America includes the largest consumer market in the world in terms of its use and consumption of manufactured goods, perishables and services.

However, the same market has high standards in seeking a comprehensive range of products, high levels of service, and a focus on value for money.

Consequently to competitively satisfy the market requires a sophisticated approach, in order to manufacture and move the right product to the end user.

As an example the outsourcing of manufacturing to low labor cost countries and its transportation to the United States as a finished product, is generally only suited to low value added product , which does not require a high level of customization

Generally the distance of low labor cost countries from the end user, with associated security, customs and regulatory constraints, do not facilitate the customization of products for the end user, while meeting short delivery schedules.

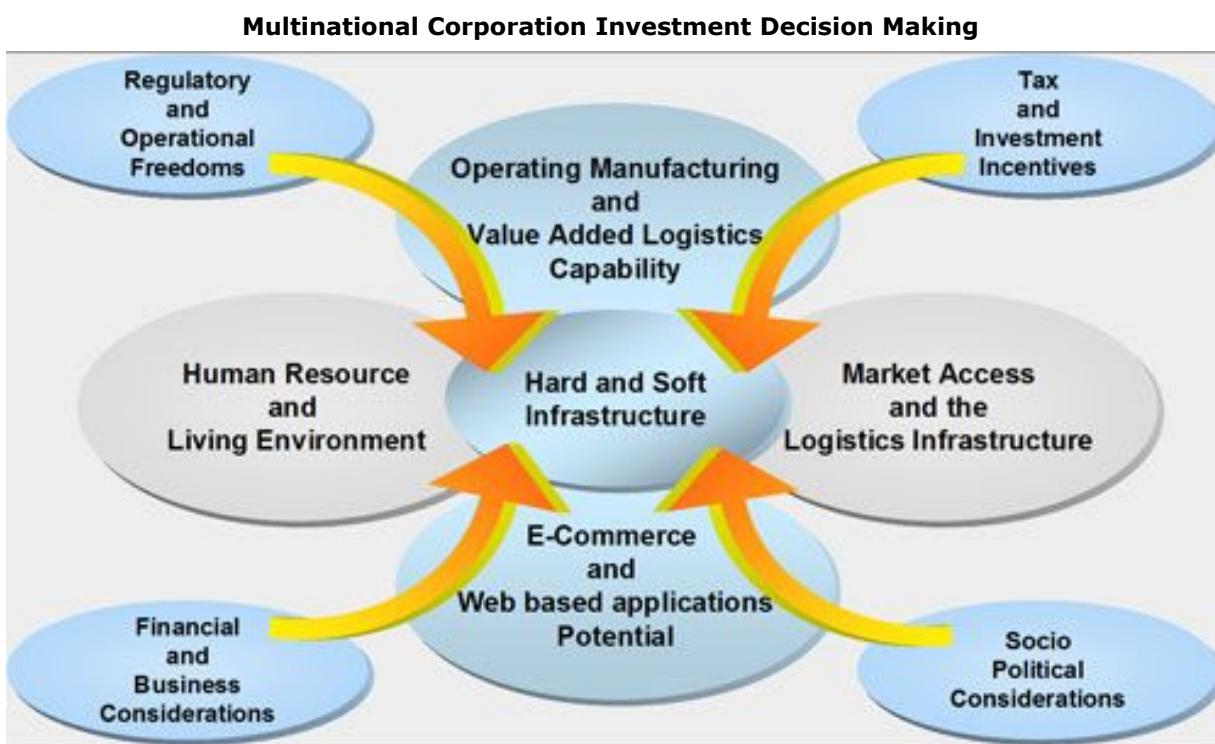
In addition this approach does not provide the speed to market required to meet accelerated sales of individual products, while maintaining low stock levels.

The complex needs of the market with its varied cost and service levels, therefore provides the opportunity to create jobs in North America . This includes activities focused on high end or time sensitive product , moving through the Supply Chain.

Examples of developments which have this focus include:

- The redevelopment of KellyUSA as an Inland Port and Value Added Logistics Park , while capitalizing on its air, road and rail infrastructure, its vicinity to Mexico and its location on major transportation routes

- The Southern California Logistics Airport, as an inland port capitalizing on the adjoining Los Angeles markets and its location on a major west-east land transportation corridor. The principal need for the successful implementation of such initiatives is to create a cost competitive operational environment, which will attract targeted tenants or users in the fields of transportation, value added logistics and manufacturing. A further requirement is to create a competitive environment building on the synergies which can be developed with other initiatives in order to address the "hard" and "soft" requirements of the Supply Chain. This includes the proactive development of the transportation feeders to and from these locations.\ By addressing the operational-logistics needs in addition to the behavioral issues which affect overall productivity, enterprises can be motivated to establish themselves in North America while serving the more demanding sectors of the local market in a competitive manner.



  
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