November 26, 2012

THOUGHT LEADERS | THE DC VELOCITY Q & A

Logistics clusters as drivers of growth: interview with Yossi Sheffi

Locating logistics companies and the businesses they serve in close proximity—in the right spot—can drive economic growth and become a significant source of jobs in our global economy, argues Yossi Sheffi.

By Peter Bradley

Yossi Sheffi may have his roots in engineering, but he has brought his scientific perspective and a seemingly boundless curiosity to bear on transportation, logistics, and supply chain management. Sheffi, a professor at the Massachusetts Institute of Technology (MIT), is the director of the school's Center for Transportation and Logistics as well as its Master of Engineering in Logistics (MLOG) degree program.

In 2003, he spearheaded an industry, academic, and government partnership to launch the MIT-Zaragoza program, which included building a new logistics university in the Spanish city.

In addition to his notable academic career, Sheffi is also a successful entrepreneur, starting or running five companies in logistics software or operations. In addition, he is a sought-after consultant and has become a regular speaker at logistics and supply chain events.

In 1997, the Council of Logistics Management (now the Council of Supply Chain Management Professionals) gave him its Distinguished Service Award, the group's highest honor.

Sheffi is the author of dozens of scientific publications and a pair of books aimed at business managers. The first, *The Resilient Enterprise*, published in 2005, was lauded for its examination of why some companies manage disruption better than others. His latest book, *Logistics Clusters*, published this fall, takes a look at what he considers major economic engines in an era of globalization. He recently sat down with Editorial Director Peter Bradley to discuss the book and his view of the significance of logistics clusters around the world.

Q: First, tell me a little bit about what you mean by the concept of industrial clusters.
A: Industrial clusters are an agglomeration of companies of the same [type] in the same geographical location: Silicon Valley for information technology, Hollywood for entertainment, Wall Street for finance companies. It has always happened throughout history, even before it was recognized by economists.

Q: Differentiate logistics clusters, if you will, from logistics parks.
A: In general, a logistics cluster is an agglomeration of several types of companies. It is logistics service...
companies. It is the logistics functions of manufacturers, retailers, and distributors. In many cases, it's companies where logistics is a large part of what they do. All these types of companies can agglomerate in logistics clusters. A cluster is just when they have lots of logistics-related activities in close geographic proximity.

A park is defined as a cluster where there is one manager for the cluster. It could be a real estate company. It could be a port authority. It could be an airport authority. But whatever the type of company, it manages the land and it provides certain services. So there are gradations of agglomerations of logistics operations, and the cluster is a little less defined. When we have lots of companies together, it is a cluster.

Q: What are the critical elements that make a logistics cluster successful?
A: If it comes down to one thing, it is the singularity of purpose among all the actors. The national government, the local government, the regional government, the companies, the chamber of commerce. They all sign up to the task of making it work.

You also need a certain geography. The site can be a port, an airport, or a central location where you can get to a lot of places and there are a lot of customers around. For example, Zaragoza [in Spain] in some sense is the middle of nowhere. Yet if you look at it, it's an equal distance from the four largest cities of Spain and close to Southwest France, which is that country's industrial region.

In many cases, there are historical factors at work. Take Singapore, for instance. Singapore, which has almost no natural resources, started as a port that had no taxes. It created a lot of traffic. It now is known as a port that has no corruption. All these things can help create a logistics cluster.

Q: What do you see as the role of government in a successful cluster development? What are the risks that government takes on?
A: The biggest risk government takes on is cost—if you want to develop a cluster from scratch, it is a significant investment. But governments all over the world are making this investment. There are certain things that only government can do, like the zoning or issuing permits. The federal government can create free trade zones. Local government can grant all kinds of tax incentives to get companies to come in and create jobs.

Q: What is the significance of logistics clusters in today's supply chain management environment?
A: First, I want to talk about the relation between logistics clusters and globalization because it is interesting. Logistics clusters are very efficient in terms of transportation. And as long as the globalization trend continues, more stuff will go to clusters, so they kind of feed each other. There is very little freight that goes directly from a factory in Shenzhen to a consumer in New York, basically nothing. It will go through some process of aggregation, some breakbulk process. You have transportation efficiency because there is a lot of freight that goes in and out of the cluster: Trucks, railroad, airplanes, ships are more full. You have higher frequencies in and out of the place. So the level of service is better and the service costs less. As a result, it attracts even more companies and it becomes even more efficient, so there is a positive feedback loop in the growth of these clusters.

If I may say something about jobs: This is where logistics clusters actually shine. Where do you start when you have only a high school degree? You could start on the ground floor in a warehouse, driving a truck, whatever. Interestingly, in this industry, there is upward mobility. If you look at companies like UPS, most managers, most executives, started on the ground. It is true not only of UPS; it is true of every company that we visited. And logistics is a growing industry.

Logistics clusters attract manufacturing companies. Because they offer good transportation connections in and
out, you can have a just-in-time operation, a just-in-sequence operation. So you have these clusters generating sub-clusters of industry. That is another element of long-term job creation.

**Q: What do you hope readers will take away from the book?**

**A:** I hope that people will take away the fact that logistics is a lot more than moving boxes. There are a lot of people who don't understand logistics. They don't understand, for example, the complexity. They don't understand that this is one of the areas that needs the most advanced information technology applications.

I also hope they will get a glimpse of what the profession is actually doing, what the profession does for improving economic development. It can create jobs for people that the high knowledge industry cannot. Logistics is not offshore. You cannot do distribution to all your retail stores from China. You have to bring it here and you have to do it locally, which means you are creating jobs and you are protecting them from being offshored next year.