Is logistics lagging?

In the 1940s, it was declared in the great musical Oklahoma! that “Ev’rythyn’s up to date in Kansas City. They’ve gone about as far as they can go.” This month, the Council of Logistics Management holds its annual convention in Kansas City. These words may be haunting some of the logistics industry personnel gathering there.

In an industry flooded with qualitative improvement claims, it seems best to start measurement with a purely quantitative assessment. Earlier this year, Robert V. Delaney of Cass Information Systems Inc. and ProLogis Distribution Services released his 12th annual State of Logistics Report. According to the report, logistics costs constituted 10.1 percent of the nation’s gross domestic product (GDP). This represents a slight increase from the previous year’s level of 9.9 percent, but is fairly close to the range within which this number has been since 1992. Real logistics improvement occurred from 1980 (16.1 percent of GDP) through 1992 (10.1 percent of GDP).

As the economy has grown, so has the importance of logistics, which has traditionally been a fairly static proportion. Despite the lack of logistics improvement, some believe that logistics has seen a banner year. During the second and third quarters of 2000 the economy slowed, creating opportunities for logistics managers to more effectively manage the third and fourth quarter inventories. But this unique inventory challenge was complicated. Usually, expanding inventories required special handling in a period of declining sales caused by macroeconomic forces. This downturn presented a rapid expansion — and then a subsequent collapse — of capital investment which drove a sudden decrease in sales of infrastructure.

Last year was also a reminder that technology is not a substitute for management. Managing is an ongoing job. Delaney observed that “it is people, process and technology. If you do not first get the people and the process right, investments in technology will not be a solution.” Some of the biggest names in technology proved this with billion-dollar inventory write-offs.

Ligation may ultimately determine which parties pay the price for errors, but not without addressing some basic management issues. An over-reliance on software, no matter how complex, is one culprit. Far too much trust is placed in programs which promise more than they can deliver. Remember, almost all of software applications rely on a business forecast which is ultimately human and subjective in nature.

The new economy has also given rise to questions about rightful ownership of inventory. With increased collaboration and outsourcing, manufacturers have enhanced the responsibilities of distributors and sub-contractors for inventory sourcing and procurement. The lack of ownership of this type of virtual inventory is boon to profitability in times of rising demand, but it causes disputes when the economy slows down.

While many business analysts point to Cisco and Lucent as examples of supply chain management and software that could not live up to its publicity, Solectron Corp may actually provide an even better example. As the world’s largest electronics manufacturer, supplying almost every major industry company, Solectron could see a hardware glut starting to form a year ago. (Their combined orders were greater than any market forecast.) But, Solectron’s customers insisted that production proceed as projected, with various financial guarantees for inventory. By the time production was halted, Solectron had built up almost $5 billion inventory from its 4,000 suppliers.

Still, logistics software expansion is to be expected. A study by investment house Bear, Stearns of 1,200 shippers found that only 34 percent now use supply chain software, but an additional 24 percent plan to do so. The movement towards mass customization — from mass production — may explain some of this activity. Henry Ford did not invent mass production, but he certainly perfected it. His system was designed to fulfill existing demand. When demand fluctuated, car dealers absorbed the product inventory and marketed the product.

Mass customization is a build-to-order system requiring flexible manufacturing and sophisticated supply chains that offers numerous financial benefits. Additionally, it satisfies customers who have come to expect increased freedom of choice — and prompt order fulfillment available with Internet shopping. This mass customization model, first applied by Dell Computer, has expanded into traditional manufacturing industries.

Some companies have taken the intermediate step of building to replenish. An inventory item is replaced as soon as it is sold. However mass customization remains the goal for optimal financial benefit. For example, Nissan Motor estimates that a built-to-order vehicle would eliminate $3,600 of existing expense.

Logistics first attracted the attention of chief financial officers when it presented an opportunity to improve a company’s financial position by reducing its operating and capital expenses. Many companies will continue to seek solutions that are unavailable in-house, by employing a combination of outsourcing and software. But disputes, such as the well publicized litigation between OfficeMax and Ryder (a failed third-party logistics engagement) and Nike’s earnings shortfall blamed on i2 (supply chain software that didn’t work) is evidence that nothing is ever as easy as it appears.

As CFOs and chief information officers become more sophisticated in acquiring logistics services and software, return on investment (ROI) matters more. Logistics is meant to be strategic as to maximize profits. Transportation management always sought to reduce expenses. However, ROI is not a simple concept. For a start, key performance indicators may not be easily determined — and may be even more difficult to calculate. Necessary information may be resident in many systems throughout the enterprise, and even then they may be subjective.

Many experts expected fourth-party logistics provider (4PLs) to fill this void. A 4PL works as a strategic partner, while a 3PL is more of a tactical one. A 4PL is a supply chain integrator that synthesizes and manages the resources, capabilities and technology of its own organization with those of complementary service providers, and then delivers a comprehensive supply chain solution. 4PL skill sets are significantly different from those needed for logistics outsourcing.

The 4PL solution everyone is watching is Vector SCM, a joint-venture logistics company between General Motors and CNF Transportation. The goal — still in the future — is for Vector SCM to take over GM’s entire $6-billion annual transportation spending.

The past year has reinforced the importance of logistics, but has not seen many improvements in the field. Kansas City may jump-start some long-due opportunities and initiatives.