Green and Cube Based Pricing™

What a great day for GREEN. I just finished reading another article on laundry detergent and was pleased to find out that by eliminating some of the water in the detergent, the bottle size was cut in half. This will lead to half the trucks to deliver, half the shelf space, and reduced plastic to make the bottles, and all the other supply chain savings generated by this simple method of reducing space required.

Changing the way things are packaged to make the most out of a trailer's space is introducing a little-noticed structural change to trucking.

Square, flat-topped milk jugs are the new way to package milk. A Sam's Club press release states the new stacking configuration saves so much *space* that the retailer can ship the same amount of milk in half the number of trucks. *That simple change is freeing up dock doors, warehouse space, and labor, and it's saving enough on fuel and freight costs to yield a 10 to 20 percent price cut for consumers.*

Wal-Mart is extending these efforts outward to its suppliers. For example, by reducing the size of packaging in 277 private-label children's toys, Wal-Mart suppliers were able to eliminate 727 container moves, save 5,100 trees, and use 1,300 fewer barrels of oil. Reducing the amount of water in laundry detergent resulted in using 128.9 million fewer pounds of plastic resin for packaging and saved 478 million gallons of water. It also reduced the number of truck moves by 2.79 million and used 20.7 million fewer gallons of diesel fuel.

Let's look at the Impact for Carriers

Large truckload carriers and small truckload carriers; some facts and opportunities:

A scarcity of freight and shorter trip lengths has led to a run up in deadhead or empty miles for truckload carriers. According to the ATA, the percent of empty miles reported by large truckload carriers (over $30 million in TL revenue) increased to 21.6% of total miles in February from 17.6% in the same month a year ago. Small TL (less than $30 million) reported empty miles 28.9% in February 2008 versus 24.9% in February of 2007. For a mid-sized carrier, say 500 trucks, a 2 percent reduction in empty miles can result in multimillion-dollar annual cost savings.

No one is paying for these empty miles. Do these figures increase the cost to you to use this equipment? Do distribution trends affect your cost?

To offset the general higher empty miles and extra time associated with handling regional freight, long haul carriers may need to rethink how they measure equipment productivity. You cannot just measure productivity in miles; you also have to measure in hours. Could/should we measure mileage and then space used per hour? Think of

package early A.M (0800), next day air shipments versus priority overnight service (10:30), a difference of 0 hours to 2 1/2 hours. Have we created more empties or a more efficient way to bill for their use? Can truckload carriers make an easy space cost comparison to compete with time definite express and LTL? Would this give shippers more capacity to choose from?

How about LTL carriers? They look at load factor here. Load factor is determined by how much WEIGHT is on a schedule. The higher the weight, the better the load factor or weight on trailer. This has always confused me when I try to buy groceries with load factor the cashier always wants money. Do you think we could use dollars per space occupied; a simple rent or lease option? Most LTL carriers use a single 53 foot trailer that has **4000** cubic feet for space and 48,000 pounds for maximum legal weight. LTL also uses a combination of 2 – 27 foot trailers for a total of 54 feet, or **4200** cubic feet for space, and 48,000 pounds for maximum weight.[1]

In the last few years, these trailers have become more common for ease of delivery in congested areas and increase space utilization to name a few advantages.

The really gifted carriers also use a system called “logistic trailers.” This is a way to have the total height of the trailers divided into two loading configurations by using a “removal deck” that allows more efficient loading space and no double stacking of pallets. “Logistic trailers” utilize superior use of space.

Why Are We Still Using a System from 1936 in this Age of Web Applications?

What has brought about this revelation in space management? Why do we all want to be green by cutting warehouse and logistics costs? What is preventing us from doing this?

It is simple; the system used to obtain your transportation cost does not include SPACE occupied. We are locked into a system that had its origin in 1936 and the carriers will not or cannot think of a way to use their existing systems for billing, cost management, and yield factors that are compatible with their existing cost systems. They still use the 1936 Class[2] rate method. The Surface Transportation Board gave us an excellent solution with the antitrust immunity elimination on January 1, 2008. You now can use

[1] Did you ever wonder why 53-foot trailers are 53 feet? Why not 52, or 54? The answer can be traced back to Dart Transit's location across the road from a can manufacturing plant. “We had a lot to do with trailer innovation and trailer length laws," Oren says. "Why are trailers 53 feet long, not 52 or 54? Because the can pallets fit in that size trailer just perfect - you can close the doors and have no space left over, not a can would fall. If I've left any mark on the industry, it's the 53-foot trailer”. Source: Lockridge, Deborah “A lasting legacy of operations and equipment innovation” *HeavyDutyTrucking.com,* January 2005, <http://www.heavydutytrucking.com/ 2005/01/100a0501.asp> October 13, 2008.

[2] Your LTL carrier pays a fee to use the NMFC class system, ask them how much they pay.

your own base rates[3] and determine how you want to "class" your freight. We suggest Cube Based Pricing™.

The National Motor Freight Classification (NMFC) has outlived its key use borrowed in 1936 from the railroads Uniform Freight Classification (UFC) of creating a "simplified" table of classes to which a rate can be assigned. International modes of ocean and airfreight have long utilized a cube/weight calculation as they were designed to serve the needs of craft with limited capacities.

With modern warehouse and transport management systems (TMS), we have the cube and weight already in tables. TMS also has the origin, destination, service requirements, and value known. The carrier could use a cube-based scale to quote a rate that would reflect the revenue they wish to earn in a particular lane of movement. This would ensure a minimum amount of revenue for shipment space occupied. A tariff that reflected cube would provide the carrier with valuable planning information for terminal cross-docks and long haul load equipment selection. A tariff reflecting cube would also provide last mile equipment selection and manpower.

Further, computers can store other shipper choices in service levels along with release value for insurance. Computers can even store delivery date/time windows to take advantage of cost saving efficiencies in day of week variations the carrier might share with them.

Add to this the ability for systems to communicate with each other in load tendering, tracking, invoicing, warehouse space requirements and settlement. This is when you have the ingredients for a transportation transaction without paper, auditors, and the NMFC.

Benefits to Shippers and Carriers

Basing a system upon cube based pricing™ benefits the shipper by providing an understandable rate structure that, with some innovation in packaging (e.g. redesign, nesting), can allow for *self-control in cost reductions*.

The system used internationally would now be used domestically, allowing uniformity in systems, data, and metrics. A system for carriers that allows for accurate cube information at time of tender will enable operational planning at forward terminals and cross-docks, as well as improved utilization of equipment.

This will allow for immediate change in the classification/FAK LTL rating system, which has become permeated with massive discounts, complex exceptions, and paperwork.

[3] If you use a Bureau Rate table (CzarLite™) the Carrier also pays a fee or you also pay a fee.

The bad news is for the multi-billion dollar legal, post-audit, and audit firms who obtain revenue from the artificially complex NMFC-based system of rating LTL in the United States.

The new adopted system will allow for paperless, pre-rated, auto pay transactions between shipper and carrier. This new system utilizes standard calculations and meaningful rate discount programs that support greater efficiency in load optimization, labor, last mile delivery requirements and fuel usage.

Shipper and Carriers New Green Pricing System Based on "Space"

In my research on freight classification and pricing, I came across this statement in an 1897 book:

"It is almost universally agreed that the **space occupied** by merchandise should be the predominating factor in the fixing of a classification and also the value of the article should have some weight" (1897 ICC Annual report, emphasis added).

Great Caesars ghost did the original founders of pricing have it right and then we let the carriers adjust or "average increase" the pricing? *How involved have shippers been in price setting policy* since the Act to Regulate Commerce of 1887 (Later known as the ICC Act)? You can now set your pricing based on your needs and not a group of 100 carriers, now a board of 6 (CCSB), to determine your shipping class. No more Rate Bureau average increases either or yearly rate increases determined by a GROUP of carriers.

Your shipments now will receive a true market value price, not distorted by years of averages and rate adjustments from carrier bureau general rate increases (GRI). No longer can NMFC changes in class assigned be applied to your shipments without your knowledge. Each carrier can now custom tune their rates to fit the current market conditions based solely on their lane balance and cost.

We have offered Cube Based Pricing™ for over a year now and have been pleased to see it finally realize some traction in a market that is being forced by the current turmoil to look at low risk, user friendly, system compatible alternatives to share and reduce cost.[4]

While Cube Base Pricing™ is not yet sufficiently fashionable for most shippers and carriers to bring into general acceptance, I feel that the long practice of not thinking that the *current method of pricing is wrong* in the internet age gives the dated method a superficial appearance of being right and is shielded as the tradition of pricing. Can you afford this type of pricing method?

[4] At present over 3500 carriers (TL and LTL), 3PL, Forwarders, Brokers have access to this system.

As the uproar increases about the lack of flexibility in the old NMFC class system of pricing and the new STB antitrust ruling is understood, this new Cube Base Pricing™ solution in time with the efficiencies and visibility offered will convert others into the modern age of transportation. Are you ready to change?

The question remaining is “how long can the shippers and carriers let this 8 to 10 percent reduction in cost remain unused”?