Modern logistics programs must make use of multiple practices and strategies in order to fully address all the challenges facing shippers in a just-in-time global business environment.

Shippers are continually looking for ways to reduce empty miles, increase revenue from backhauls, drive down fuel costs, increase driver productivity, improve equipment utilization, monitor assets across their network and improve staff efficiency. This is why today, many shippers employ some mix of private and dedicated fleet transportation, combined with common carriers in order to achieve their logistics objectives. Common carriers meet these shippers’ requirements for one-way, line haul truckload moves, or for LTL shipping. But these shippers find that dedicated services or private fleets are required to ensure greater control and strong service for deliveries to customers, or ensure access to unique equipment types. Additionally, many of these shippers prefer to use branded trucks as part of branding/advertising strategies, disseminating their brands to customers and the general public from the sides of trailers on interstates from coast to coast.

Shippers utilizing both common carriers as well as private or dedicated fleets struggle to find appropriate software solutions that meet the needs of this diversified strategy. This is especially true of food shippers and retailers who are typically the heaviest users of private and dedicated fleets. The challenge is rooted in the fact that there are solutions available to meet the unique demands of private fleet management or solutions developed to address the needs of transportation using common carriers. The former were primarily developed to meet the requirements of trucking companies (and adopted by heavy private fleet users) and the latter (TMS solutions), were largely designed to accommodate the needs of shippers using common carriers. Yet, fleet management tools are not very effective at handling the needs of common carrier transportation planning and management. Conversely, most traditional TMS tools don’t have the functionality needed to address the requirements of private and dedicated fleet management.

So companies engaged in any mixture of private/dedicated fleet shipping and common carrier shipping must make a choice between two imperfect scenarios. Either they emphasize the importance of private/dedicated fleet management and opt for a fleet management tool, or they emphasize the importance of common carrier shipping and misuse a TMS employing compromised “work-arounds” to adapt it for managing private/dedicated resources (missing the opportunity for savings). Or, if they’re amenable to paying the IT costs associated with integrating and implementing two solutions and, they could deploy both a fleet management tool and a traditional TMS in their organizations. To-date, all of these options have had significant limitations. This paper explores the diverging needs of a private/dedicated fleet environment and those of a common carrier-centric environment, before sharing information on a breakthrough new solution that effectively meshes the competing (yet related) concerns into a comprehensive solution for transportation and fleet management, representing the state of the art of transportation management software.
The Overall Landscape

The growth in the utilization of private fleets continues amongst shipping organizations in 2013. According to recent research from ACT Research, an analyst firm specializing in reporting on fleet size and distribution, 38.6% of the overall $563 billion trucking industry is comprised of private fleets. However, the number of organizations relying exclusively on private fleets for their transportation needs is negligible. Most organizations rely on a variable mixture of private fleets, dedicated fleets and common carriers to move their loads both inbound and outbound. Even the largest users of private fleets – like PepsiCo (with 16,969 tractors), Coca Cola (with 8,060), Sysco (with 7,618) and Walmart (with 6,142) – are heavily involved in the management of both dedicated fleets and common carriers to address the ongoing shortfall in capacity. As a result, companies heavily invested in private fleets – and not just these largest examples – are faced with the challenge of finding appropriate software solutions that can handle the reality of their transportation and logistics needs, which necessitates this mix of common carriers along with private and dedicated fleets.

The Scope of TMS Solutions

Designed with common carrier shipping in mind, nearly all TMS solutions are focused on the functions necessary for automating the tendering and assignment of loads to common carriers who assume much of the burden of managing the assets and labor required. In this arrangement, once the carrier has delivered the load and it is confirmed in the TMS, the carrier is paid and the transaction is more or less complete from the shipper's point of view. There is no need to consider backhauls for empty trucks when using common carriers to ship.

Responsibility for maintaining assets and managing drivers is the responsibility of the carrier and that is why most TMS solutions do not offer driver or equipment monitoring or compliance recording, such as driver and equipment history.

If a customer wishes to use a typical TMS for use with a private or dedicated fleet, often the TMS vendor will suggest the “simple solution” of regarding the fleet as “just another carrier” in the system. In this arrangement, the private or dedicated fleet may be selected on certain lanes, but the shipper is afforded very little support from the software when it comes to typical, day-to-day fleet and driver operations such as driver assignment, dispatching, communications and payroll.

The Scope of Fleet Management Tools

Unlike a traditional TMS and the one-way, common carrier shipping it manages, private and dedicated fleet managers must necessarily concern themselves with more than just the one-way movements shippers use common carriers to address. Shipping via private or dedicated fleet, the fleet manager must account for numerous concerns not relevant to shippers using common carriers. Driver and equipment utilization, minimizing empty miles, maximizing revenue from backhauls, driver/equipment management, and trip histories are just some of the activities a fleet management tool is designed to address. In addition, a private fleet manager needs support for calculating driver pay, and executing driver payments through integration to a payables system, and for dispatch communication using Qualcomm devices (or similar systems). These issues are of no concern to an organization relying on common carriers, but shippers who rely on private or dedicated fleets need software support in these areas, and a good fleet management solution will provide this. However, fleet management tools tend to have limited functionality for selecting common carriers based on a complex routing guide. The same is true for facilitating EDI communications such as load tenders and status updates; rating all types of contracts used with common carriers or auditing freight invoices from common carriers. Fleet management tools typically lack
shipper-oriented consolidation tools, since these systems were just not originally designed to aid shippers in saving money—they were designed to help carriers receive orders, manage their costs and bill their customers.

**THE GAP BETWEEN SOLUTIONS**

As noted, many organizations attempt to select the tool—a traditional TMS, or a fleet management system— they feel will be most applicable to their particular needs and then improvise in managing the portions of their transportation program not well-addressed by their chosen tool. We’ll explore the issues that arise in such organizations in the next two sections.

**USING TMS TO MANAGE PRIVATE OR DEDICATED FLEETS**

Shippers that opt to use a TMS to address private and dedicated fleet management (in addition to common carrier management) quickly discover the limitations of this strategy. A typical TMS lacks functionality for logging drivers’ miles driven and for managing driver payment— unlike fleet management tools which integrate with payroll processors such as ADP. As work around, the shipper would typically ask drivers to log mileage manually and submit this in order to get paid for their work. Fleet management staff would then take this data, verify driver submissions, calculate the drivers’ pay using spreadsheets, and enter the data manually into a payables system. In addition to requiring a fair amount of manual efforts for drivers and fleet management staff, the inability of these shippers to accurately and automatically calculate the correct driver pay based on standard mileage calculation tools (such as Milemaker) puts the shipper at risk of either overpaying drivers or underpaying and creating driver dissatisfaction.

Perhaps even more troubling is the fact that since TMS solutions are typically designed for use with common carriers and the one-way trips they make, shippers with a mix of dedicated, private and common carriers sacrifice the rate comparisons which are critical to optimizing cost savings in fleet management. The rating logic that a typical TMS uses to measure one-way movements simply isn’t transferrable for use in the multi-leg, round trip movements required by private and dedicated fleets. TMS tools simply lack the ability to log empty miles (and out of route miles) or to provide adequate visibility into costs.

A traditional TMS also doesn’t provide the shipper with the flexibility to build and adjust planned fleet movements and then transmit the changed route plans to drivers via their in-cab terminals (like Qualcomm). So again, the shipper is forced to use manual approaches which are error prone, require more staff, and which may negatively impact customer service if customer orders don’t get delivered as planned (e.g., a critical order doesn’t get communicated to the driver on time).

Overall, it is unwieldy for a TMS to easily manage common private fleet scenarios such as multi-trip movements, shuttles, equipment swaps or pool point arrangements. For example, private fleet managers might wish to plan to swap a trailer and have a second driver continue with the remaining deliveries. A traditional TMS just isn’t built to manage this activity, and would have no way of breaking the shipment into separate trips with different tractors and drivers without taking several, extra, manual steps to cancel and recreate the shipment. Also, recording the distance driven by each driver for payroll and hours of service becomes a manual process in such cases.
USING FLEET MANAGEMENT TOOLS TO MANAGE COMMON CARRIERS

Traditional TMS tools have strong functionality for selecting the correct contract carrier based on business rules (i.e., a routing guide) shippers can set up in the system. TMS tools have the ability to compare carrier rates and select the most cost-effective carrier for a move, and also select the best mode for a move (for example, trading off LTL vs. TL), while considering transit time and cost. A good TMS will also have effective optimization algorithms for grouping shipments in order to reduce cost for the shipper. Fleet management tools, which were originally designed from the point of view of trucking firms, lack most of this functionality, or do a poor job implementing it.

The norm when communicating with common carriers is to tender to them and get responses back from the carrier via EDI, or over the web. Fleet management solutions which originated as tools to help a single trucking firm manage their operations weren’t designed with this functionality in mind. As a result, those using a fleet tool to address common carrier movements find themselves in the position of making a multi-touch, manual process out of what should be a single-step automated process.

Another shortcoming of using fleet tools to manage common carriers lies in the nature of the technology itself. Many fleet management tools, by design, are not built to be web-based. They grew out of solutions built for trucking firms using legacy technologies which were developed in the 1990’s. It has been clearly demonstrated over the past decade, that transportation software products based on web-based, software-as-a-service or “SaaS” technologies are more cost-effective to operate for most shippers, and take less time to implement than legacy tools. Additionally, legacy software products don’t lend themselves to managing a network of carriers over the web, with functionality such as EDI connectivity, web tendering, web tracing updates from carriers, or spot quoting over the web. If you’re a trucking company without the need for a system allowing communication with many common carriers, this isn’t an impediment. But if you’re a shipper using a blend of contract, dedicated and private carriers, the SaaS model is best suited to managing the needs of both.

BRIDGING THE GAP

It has become clear that the best-in-class transportation management solutions must be able to provide a single-stream solution for managing all variety of carrier types in a seamless fashion. This means software providers must incorporate all the best functionality from both TMS for common carrier management and legacy fleet management tools. UltraShipTMS is designed to bring all the functionalities and relevant workflows under one system. UltraShipTMS incorporates best-of-breed shipper-oriented TMS functionality for managing a network of common carriers, while also providing shippers with state-of-the-art functionality for managing dedicated and private fleets. System functionality includes:

- Best of breed functionality for managing common carrier logistics, including contract management and rating for all modes of transport, rules based tendering, spot quotes, shipment tracing, and freight audit/pay;
- Best of breed functionality for managing private and dedicated fleet logistics, including Qualcomm integration, driver and equipment management and trip history, driver pay management, shipment tracing, and backhaul management
- An optimization engine that supports load building for both common carriers and private/dedicated fleets.

Having all this information managed under a single stream system enables users to perform analysis and reporting in an unprecedented fashion. Housing all the data from common and dedicated/private carrier movements in a...
single database enables exceptional freight reporting and cost analysis useful for network optimization practices. Access to this data is instrumental in leveraging assets to minimize empty miles, monitor carrier performance and view overall transportation spend.

**CONCLUSION**

The SaaS model for transportation management has really changed the game, allowing shipping organizations of all sizes to compete on an equal footing through more active management of for-hire resources and the ability to benchmark rates. However, there are benefits to maintaining private/dedicated fleet assets which make it very attractive for shippers to employ a blend as a best practice. National Private Truck Council (NPTC) President, Gary Petty reports that most common reasons for operating a private fleet are:

1. To gain direct control of transportation capacity on demand
2. To control costs, and
3. To provide consistent and high quality customer service

A different NPTC survey recently found about one in three private fleet operators say their fleets are more cost efficient than for-hire carriers, and a whopping 88 percent say that they provide consistent and high quality customer service.

That's why today's shippers are increasingly using a mix of dedicated and private fleets, alongside common carriers. Best in class logistics organizations have found that they need a mix of both of these approaches in order to meet the cost and customer service expectations of their organizations. Until recently, these shippers have lacked appropriate software tools that allow the management of all aspects of their transportation networks, with the available software systems tending to favor management of either common carriers, or dedicated and private fleets.

UltrashipTMS has proven customer case studies in industries that use a mix of private and dedicated fleets and common carriers, such as the food industry, consumer products, and the home and beauty products industry. As opposed to other software products which are well-suited only to common carriers, or private/dedicated fleets, UltrashipTMS solves the problem faced by today's major shippers—managing both contract and private/dedicated fleet transportation in a best-of-breed manner to minimize costs while maximizing customer service.