BIG DATA: What can it do for me?

In our previous articles we documented the many and various ways Big Data was created. As each week passes in transportation, people are discovering additional data pieces that they want to capture. GPS tracking and the recent mandate for Electronic Logging Devices (ELDs) are only the beginning. Imaging (including Proof of Delivery Signatures, photographs of damaged and/or improperly loaded freight, etc.) requires real time documentation. The entire landscape of freight shipments is changing almost daily.

The capture and retention of massive data is relatively easy. The difficult part is to determine what information you truly need to manage your business relative to your business plan. Every fleet has different requirements – whether you are a Private fleet, Asset based Carrier, Dedicated Fleet, etc. In addition, Dry Vans, Reefers, Flatbeds and Tankers all operate with different specifications. Before you begin to capture too much data, it is important to think about questions such as: What do you want to know? When and how often do you need updates? What format do you prefer to work from? What are you going to do with the data once you have it? A few examples of some of the various types of information critical for different fleets are:

Private Fleets	For Hire Carriers
Route Planning	Lane Analysis
Dock hours	Dead head miles
Store level on time	Shipper on time
Backhaul opportunities	Minimum time between loads
Costs per delivered piece	Revenue per mile
Customer satisfaction	Aged receivables (reducing)

Not only does the fleet type have different requirements but the freight being hauled has different requirements that must be tracked. For example, dry vans, flatbeds, reefers, and tankers create multiple different processes and metrics.

There are many efficiency improvements that can be achieved by the collection and analysis of Big Data. Various combinations of latitude/longitude, time stamps, images, text, and numeric information must be captured. Documents must be indexed for management and attached for invoicing, driver settlement and P&L reporting. You must be sure to think about all aspects of your operation and think in terms of developing a meaningful data plan.

When you decide to engage Big Data, you will also need to consider the increased storage requirements and IT requirements for backup and restoration of your information. Time is required to build accuracy into your asset profiles (both personnel and equipment). Profiles also need to be built for shippers, brokers, and consignees. By building historical profiles you can better measure your tractor/trailer ratio and predict potential issues that cause delays and lost revenue. A large percentage of freight shipments are seasonal -- thus creating capacity and profit issues.

Big Data capture and analysis can hold the future for increasing the volume and revenue of your fleet if a For Hire Carrier or can offset your costs if a Private Fleet.

The benefits that can be derived from effectively managing your data can dramatically improve the efficiency and profitability of your fleet. The key to making this happen is to make sure your fleet management provider understands BIG DATA and the importance of useful analytics in addition to providing adequate disk storage to maintain giga and terra byte information. Storage is inexpensive but backup/restore and data management processes are required to access / analyze and visually present the information in a format that is easily interpreted for all of your personnel - including dispatchers, sales, administrative, management and drivers. Used correctly, this could even become a major factor in driver hiring and retention.

Big Data can hold valuable insights that can transform your business . . . . .

"But unless it is managed properly and without the proper tools, big data is JUST BIG NOISE."