

WHITE PAPER

HOW TO TURN BIG DATA INTO ACTIONABLE INTELLIGENCE

THE FOUR STEP PROCESS TO
CONTINUOUS COST SAVINGS



Soaring Performance.

INTRODUCTION

Supply chain managers are tasked with ensuring all freight is moved efficiently. The more complex a supply chain, the more opportunity for costly kinks to develop. Establishing key performance indicators (KPIs) is one way transportation teams can monitor performance and seek out ways to save money. But KPIs are only one piece of the puzzle. Within the company’s transportation management system (TMS) lies information to help managers make better business decisions: it’s called actionable intelligence. The amount of information a transportation management system can provide depends on a number of factors including years of data collected and if the system is cloud-based or on-premise. This white paper will explore how the data saved in a TMS can be turned into information managers can act upon to improve supply chain performance.

WHY SAAS IS BEST

Software-as-a-Service (SaaS) solutions empower companies of any size to leverage the combined benefits of cloud computing and big data. According to global research firm Gartner, the demand for big data analytics has been the largest driver of SaaS subscriptions¹. In fact, more than three-quarters of global enterprises will use advanced analytics to improve business performance in the next five years². At the 2016 Gartner Supply Chain Executive Conference, it was reported that the number of new customers seeking a cloud-based (SaaS) transportation management solution is between 60 and 70 percent.

There are several advantages to a SaaS model that make it very appealing to business leaders.

1. QUICK IMPLEMENTATION

A SaaS implementation, on average, can take between 12 and 16 weeks.

2. OPERATIONAL FLEXIBILITY

You can access the system anywhere that you have an Internet connection. You don’t have to be in the office to obtain information.

3. PAY AS YOU GO

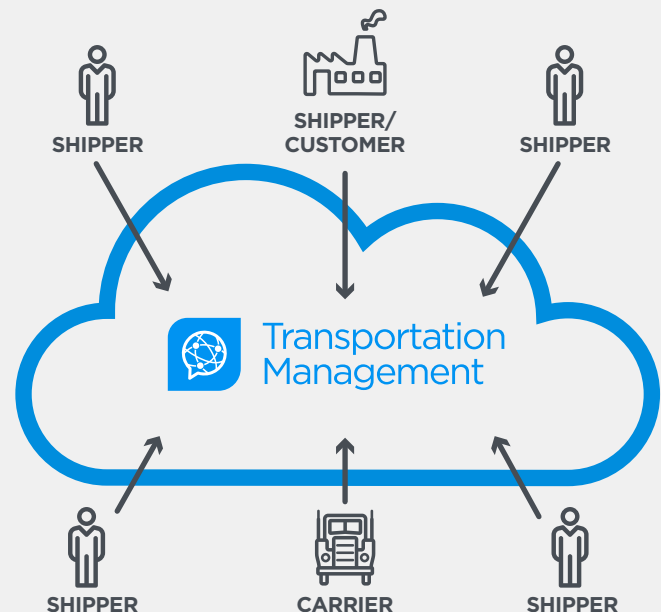
SaaS-based services establish a monthly fee for using the technology versus paying a large lump sum for an on-premise solution.

4. UPGRADES

The system is automatically upgraded on a regular basis for better performance and increased functionality.

5. SECURITY HANDLED BY VENDOR

The vendor is responsible for maintaining security.



While all of those advantages are behind the shift to SaaS solutions, a cloud-based TMS alone is not enough. The real power is found in the network infrastructure. Actionable intelligence is best leveraged by users who choose a TMS solution that is not only SaaS-based, but also a single instance with multiple tenants. In other words, one platform of technology that can be privately accessed by countless customers.

The single instance, multi-tenant environment creates an ecosystem of thousands of supply chain participants sharing information through the process of transacting freight movements. This ecosystem becomes increasingly more powerful as the network continues to add participants. Connecting shippers, carriers, suppliers, and third parties has been a challenge for most supply chains. However, through a SaaS-based TMS, the connection of those parties has already been established.

IS YOUR SUPPLY CHAIN SOCIAL?

In this day and age of connectivity through social channels, it's no surprise companies are demanding instant access to real-time information. One way to achieve global visibility is through a supply chain operating network—an inherent by-product of a SaaS-based, single instance, multi-tenant network. All of the information gathered through the network from countless sources such as carriers, shippers, warehouses, etc., is pooled together and easily accessible to all end users. Shippers can join forces to optimize loads while carriers coordinate to reduce empty miles and their carbon footprint. Just like social networks, the larger the network, the more opportunity for collaboration.

A scenario where a supply chain operating network would be beneficial is during a severe weather event such as a hurricane or flood. Information about traffic restrictions from driver telematics to reported delivery delays at warehouse docks are reported in real time and relayed to all end users of the TMS. This allows for faster response time to disruptions as all parties are instantly aware of the reason for the delay in schedule and can communicate on collaborative opportunities to get the shipment back on track.

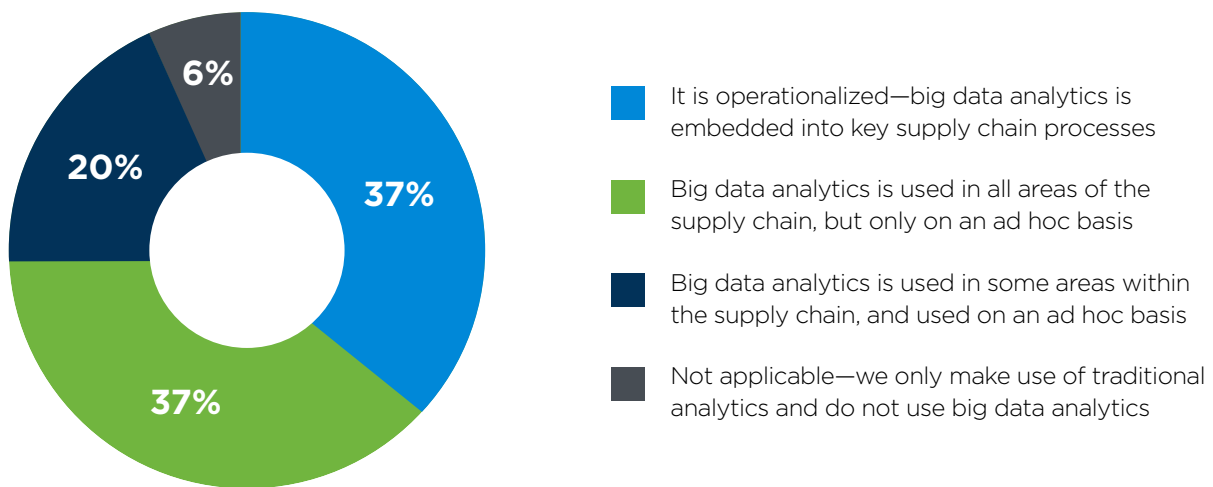
SOCIAL SUPPLY CHAIN BENEFITS

- 1 Enhanced Response Time to Disruptions
- 2 Real-time Collaboration
- 3 Insights from External and Internal Sources
- 4 Increased Service Levels

WHEN BIG DATA BECOMES A BIG PROBLEM

You’ve heard the expression too much is never enough, right? That may not be the case when it comes to big data. You can easily get overwhelmed with mountains of information that you don’t know how to analyze. In fact, a research study by Accenture found 97 percent of executives report having an understanding of how big data analytics can benefit their supply chain, but only 17 percent report having already implemented analytics in one or more supply chain functions³.

FIGURE 1
Companies’ Current Use of Big Data Analytics in the Supply Chain



In Figure 1, you can see a breakdown of how respondents reported using big data analytics. Thirty-seven percent embed it into key supply chain processes, 37 percent use it only on an ad hoc basis, 20 percent used it in some areas of the supply chain and on an ad hoc basis, and 6 percent don’t use it at all.

One of the reasons for not using big data analytics in supply chain strategy is the lack of proper support on the team. Big data analytics requires specialized skills in finding, manipulating, managing, and interpreting data to be effective, but researchers found only 34 percent of companies have an independent team of data scientists focused on big data analysis⁴. This is how a robust transportation management system fueled by a large network can provide cost savings. The software helps drive better business decisions by revealing information hidden in the data about your supply chain.

WHAT IS ACTIONABLE INTELLIGENCE?

Actionable intelligence is a process of continuous improvement that involves four steps: data, analytics, decision, and execution.

Companies that do not have a team of analytic researchers at their disposal can use this iterative process to increase the effectiveness of its supply chain. This is best accomplished with a TMS system that is a single instance and multi-tenant so all of the transportation information from multiple companies is available for real time benchmarking information. The TMS software will identify statistical trends with the help of simulation and modeling techniques.

TACTICAL VS. STRATEGIC QUESTIONS

The foundation of managing transportation effectively revolves around key performance indicators. KPIs are the numerical measurements set to evaluate success at reaching target goals for the business. Managers make decisions based on how the company or a business vendor, such as a carrier, is performing against established KPIs. Some common carrier KPIs include: tender response time, tender acceptance, on time pickup, routing guide compliance, and detention. Evaluating performance on a lane-by-lane or carrier basis leads to very tactical decision making, which is the first step in strengthening a business.

When you bring actionable intelligence into the decision making process, you gain a deeper understanding of the inefficiencies in the supply chain. This leads to asking more strategic questions such as “are my distribution centers in the right locations?” or “How will my supply chain be impacted, from a cost and service perspective, if I move locations?” Actionable intelligence helps you challenge the transportation climate and provides the information necessary to make significant and impactful changes to your supply chain.

EXAMPLE

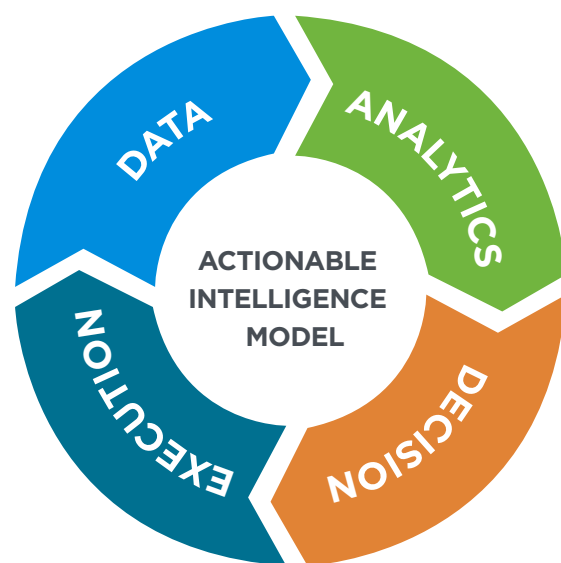
Today, your company is hauling freight from Chicago, Illinois, to Atlanta, Georgia, at \$2.15 a mile. Analytics in the TMS can determine if you are paying more, less, or the same in that lane as you have in the past, and also provide benchmark information to current trends throughout the industry.

DRIVING THE ACTIONABLE INTELLIGENCE CYCLE

Actionable intelligence never stops. It helps shed light on problem areas in your supply chain that need to be addressed.

- 1 The cycle starts with the **data collected in the TMS**. The depth of this data depends on the sources, type, and size of the network. As previously noted, a SaaS-based, single instance, multi-tenant network allows for an exhaust of transportation data to be shared with all users. Private company information remains confidential. The data in the system is compiled and shared as benchmarking or historical trending information for network participants. Users can have their own private data and compare it on screen with realtime industry data aggregated from the TMS.
- 2 The second step involves **analyzing the data** which includes information on a company's transportation moves as well as information on all other users of the network. The byproduct of this network model is real-time industry benchmark information to draw comparisons against KPIs.
- 3 Next, it's time to **start making some decisions** based on the information you have uncovered in the analytics. These decisions can be tactical or strategic. Because actionable intelligence is a constant cycle, you can solve one problem and then start the process again. This step may include an adjustment of process or policy.
- 4 The last turn in the cycle is **execution**. Execution will typically involve several levers, including targeted procurement, mode conversion, and various forms of optimization. It might also consist of implementing new production and sourcing schedules to minimize supply chain costs.

Once the company goes through execution, it's time to start the actionable intelligence cycle again. Actionable intelligence provides the ability to drill deep into how well your supply chain is performing and challenges managers to ask questions about areas of the supply chain they have never considered before.





**ACTIONABLE
INTELLIGENCE
REDUCED
SPEND**

ACTIONABLE INTELLIGENCE REDUCED SPEND BY 8 PERCENT FOR FOOD & BEVERAGE COMPANY

BluJay Solutions offers its customers actionable intelligence through Transportation Management. One of the nation's largest milk producers was struggling with limited visibility to its entire network which reduced the opportunity to collaborate internally. The company also had a sizeable fleet operation that was not being leveraged in a capacity constrained marketplace. Actionable intelligence revealed the need to drive some best practice changes at various facilities to create a centralized system. With increased utilization due to shifting some freight to different modes, the company also unlocked additional carrier capacity. Additional capacity allowed its fleet to be utilized for revenue generation and collaboration opportunities within the company. The company gained cost control over its freight and was able to standardize its accessorial charges.

By utilizing actionable intelligence, the company realized a decrease in accessorial charges up to 8 percent. Additional costs savings realized through visibility to round-trip opportunities allowed the company to negotiate lower rates with carriers, when marketplace conditions were doing the opposite. Combined with collaboration opportunities within the BluJay's Global Trade Network, the organization was able to unlock cost reductions and revenue opportunities, all while leveraging business process outsourcing for the strategy, planning, and execution of their transportation.

WHAT HAVE WE LEARNED?

SaaS Transportation Management System (TMS) solutions have made it possible for businesses of all sizes to leverage big data for supply chain network optimization through actionable intelligence. Companies that use big data to improve supply chain management processes have experienced faster reaction times to supply chain interruptions, enhanced supply chain efficiency, and better integration across discrete supply chains.

The transportation ecosystem created by a single instance, multi-tenant SaaS environment provides the type of real-time industry data available only to connected network users. Actionable intelligence will give your business a competitive advantage by poking holes in your current state and guiding you to a new state where cost savings significantly impact the bottom line.

WANT TO LEARN MORE?

To find out how much your business can save using actionable intelligence, contact BluJay Solutions via solutions@blujaysolutions.com or visit www.blujaysolutions.com.

Footnotes

1. Gartner Says Modernization and Digital Transformation Projects Are Behind Growth in Enterprise Application Software Market. (August 27, 2015). Gartner Newsroom.
2. Ibid
3. Big Data with Big Success Executive Summary, Accenture, (April 2014).
4. Ibid

About BluJay Solutions

BluJay Solutions delivers supply chain software and services to the world's most progressive retailers, distributors, freight forwarders, manufacturers, and logistics service providers. Transforming supply chain logistics with the BluJay Global Trade Network, we enable customers to unlock the power of more than 40,000 universally connected partners. With BluJay, companies can achieve greater trade velocity, transform their supply chain economics for disruptive advantage, and see beyond the horizon to optimize their future in the global economy.

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