



GPS Solution for the Chemical Industry

Leveraging GPS data to track and manage chemical shipments at the enterprise level

Customer Benefits:

- >> Improved management of trucks carrying HAZMAT shipments
- >> GPS data translated into actionable intelligence that impacts the bottom line
- >> Monitor and validate truck departure, travel and arrival times
- >> Provide customers with accurate data on shipment arrival and departure times
- >> Automated alerts when specific supply chain events occur

Many Chemical companies have gained better visibility of their truck fleets by deploying GPS tags. However, these companies often find that simple visibility isn't enough. To keep track of large fleets of trucks that are in constant motion, and tie those movements to customer commitments that cost money when they are not met, one Chemical company turned to Savi SmartChain®.

Savi SmartChain takes a management-by-exception approach to improve ground-level asset tracking, process automated location updates and manage chain-of-custody visibility beyond the four walls.

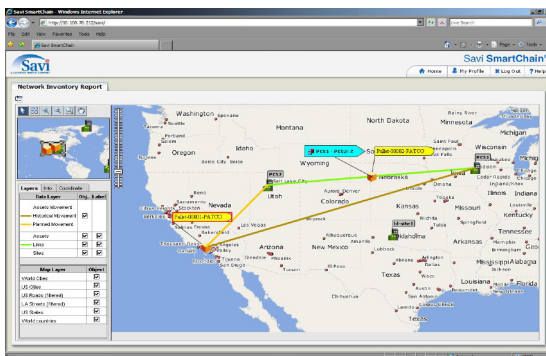
Savi's customer, for example, receives dwell-time email alerts whenever a shipment has not moved as planned. Alerts are also sent to the responsible supply chain partner so that immediate action can be taken to avoid missing a customer deadline or incurring excess demurrage fees.

Simplistic GPS tracking software, spreadsheets and ERP systems cannot provide this level of intelligence.

The Chemical company was able to extend its corporate investments in GPS technology by enabling real-time tracking and management of GPS-tagged assets. Savi SmartChain helped this customer achieve the following results:

- GPS data translated into actionable business intelligence
- Improved customer service
- Faster identification and resolution of in-transit problems
- Reduced fulfillment lead time
- Accurate auditing of demurrage bills
- Elimination of human error associated with manual work processes to capture and enter data

Leveraging GPS data and existing ERP systems with SmartChain enables Chemical companies to correct a host of supply chain inefficiencies, resulting in significant bottom line improvements.



Savi SmartChain Asset Management Solution (AMS)

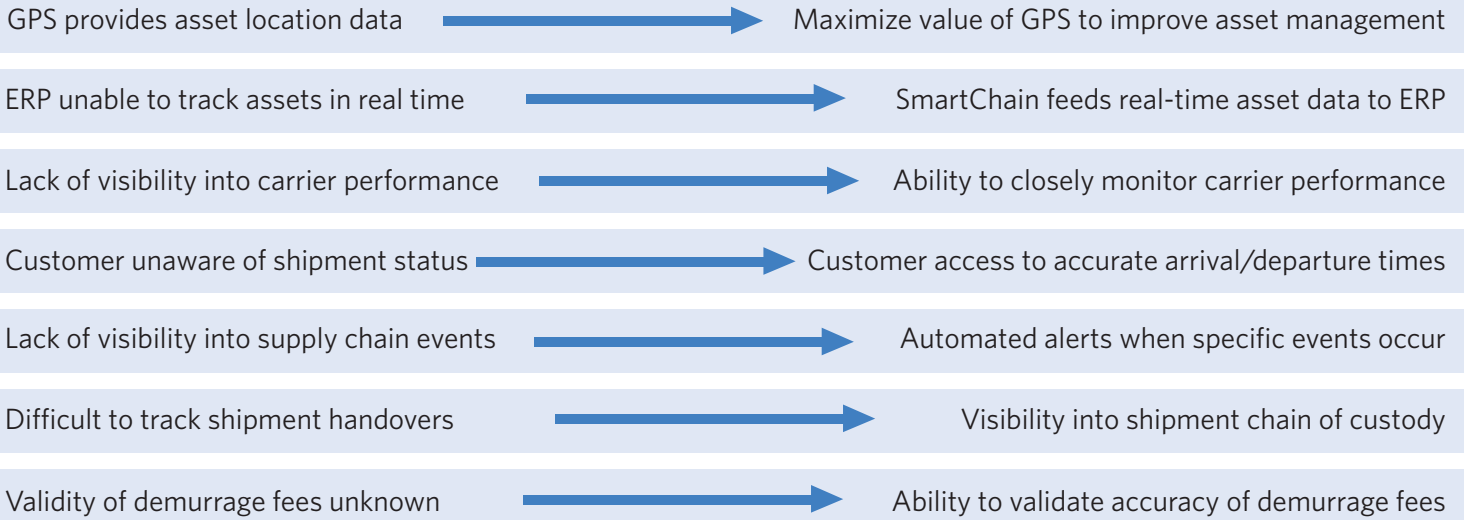
SmartChain AMS improves asset management and utilization through real-time tracking via bar code, RFID, GPS and sensors. Key value drivers include:

- **Improved Visibility:** Captures near real-time asset updates and displays them on maps and reports.
- **Improved Utilization:** Identifies and balances over- and under-utilized assets.
- **Increased Operational Efficiency:** Sends alerts when shipments arrive or are delayed, creating awareness and empowering organizations to reduce safety stock levels. This helps reduce exposure to costly expedited shipments and demurrage fees.

In summary, SmartChain AMS answers the questions, "Where are my assets and how can I better utilize them?"

Before solution implementation

After solution implementation

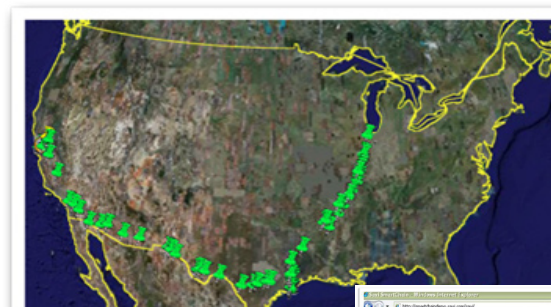


More About the Customer...

- 2.5 million shipments per year
- 130 billion pounds of product shipped each year
- 45,000 customer ship-to locations

More About the Assets...

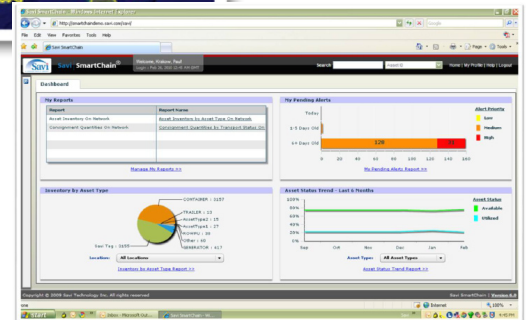
- Trucks tagged with GPS devices move within geofenced areas
- Trucks sometimes cross international borders
- U.S. Department of Homeland Security requires close tracking of HAZMAT shipments



Green dots depict truck movements, as displayed in SmartChain.

More About the Solution Benefits...

- **Strategic Level:** Improved ability to tune operation
- **Tactical Level:** Progress of business processes is monitored on a dashboard
- **Operational Level:** Direct feedback to employees to approve/disapprove actions



SmartChain dashboard presents high-level summary of alerts and asset data.

About Savi

Savi Technology provides an integrated suite of complementary Automatic Identification & Data Capture technology products and solutions that drive business value by reducing supply chain assets, inventory and operational costs for commercial enterprises, defense agencies and other government customers. Founded in 1989, Savi is a wholly owned subsidiary of Lockheed Martin [NYSE: LMT], with headquarters in Mountain View, Calif., and offices in Singapore; Melbourne, Australia; Farnborough, UK; Lexington, Ky.; and Washington, D.C. For more information, visit www.savi.com.

About Lockheed Martin

Headquartered in Bethesda, Md., Lockheed Martin is a global security company that employs about 146,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services. The corporation reported 2009 sales of \$45.2 billion. For additional information, visit www.lockheedmartin.com.

Contact Savi

Let us show you how Savi's supply chain solutions can work for your organization.

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