



# Savi Solution for the Chemical Industry

An enterprise-wide platform for tracking & managing supply chain assets

## Customer Benefits:

- >> Asset visibility for customers and across business units
- >> Real-time tracking of assets through a global, multi-modal supply chain
- >> Compliance with regulations covering HAZMAT transport
- >> Fast transfer of shipment data to first responders in event of an emergency
- >> Track shipment chain of custody
- >> Improved asset utilization
- >> Compare asset movement plans with actual movements

Chemical companies use a combination of Enterprise Resource Planning (ERP) systems, Supply Chain Management applications and spreadsheets to track and utilize supply chain assets. However, these systems are ill suited for tracking assets across the enterprise and into supplier and customer supply chains.

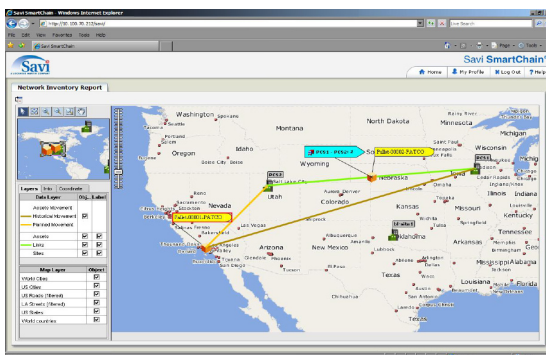
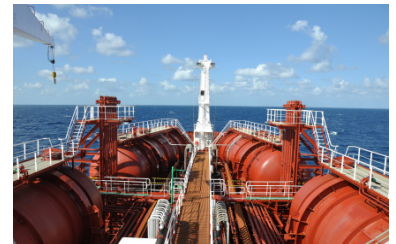
The Savi Solution for the Chemical Industry extends corporate investments in ERP systems by enabling real-time tracking and management of assets across the enterprise and the globe. The solution helped one chemical company meet the following goals:

- Establish an enterprise-wide platform that tracks all asset types across the global supply chain
- Achieve compliance with regulations covering the traceability of Hazardous Material Fleets
- Maximize asset utilization

These results were achieved with the Savi SmartChain® Asset Management Solution (AMS), a centralized software platform that gathers data from wireless tracking technologies such as bar code, RFID, GPS and sensors. The data is translated into actionable information on the location, movements and condition of assets, such as chemical tank rail cars. Customers and business units have varying degrees of access to this data.

SmartChain AMS is projected to generate value for the customer by way of the following improvements:

- Elimination of historical 10-15% human error rate associated with manual work processes to capture and enter data
- 50% improvement in response time to identify and resolve in-transit problems
- 20% reduction in excess product / safety stock inventory
- 20% reduction in container fleet
- Up to 90% improvement in reliability of delivery time windows
- Elimination / early detection of product theft



## Savi SmartChain Asset Management Solution (AMS)

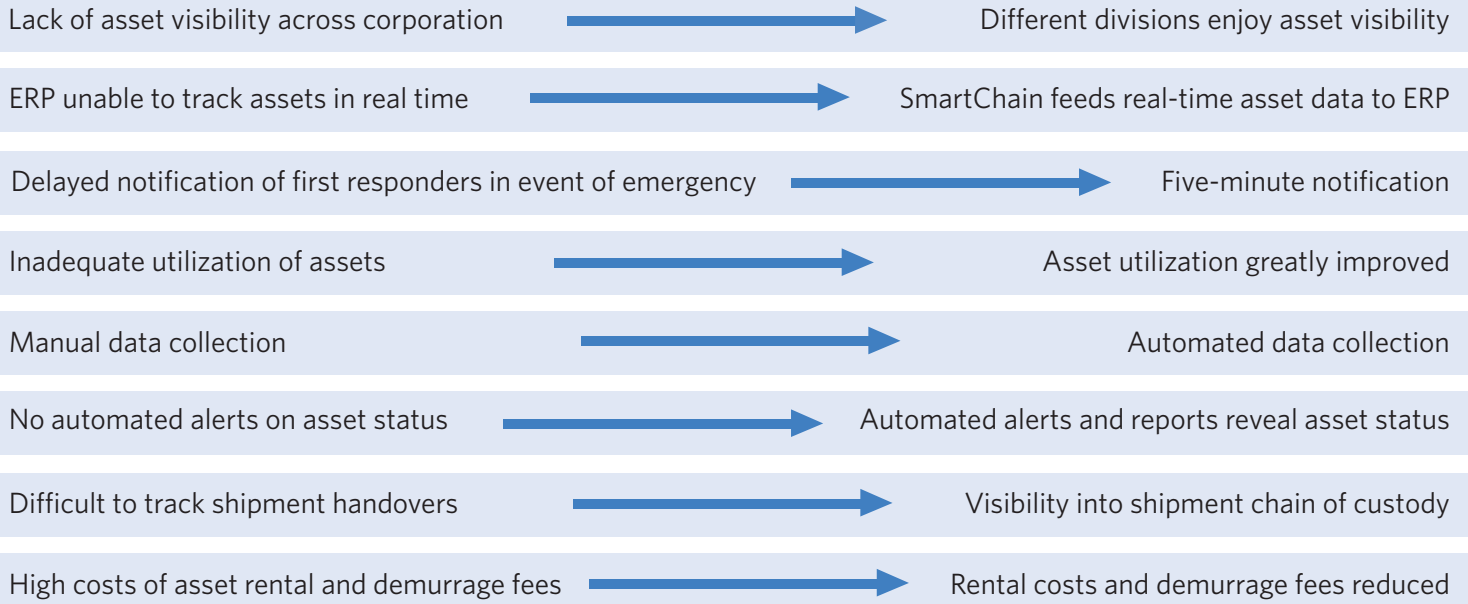
SmartChain AMS improves asset management and utilization through real-time tracking via bar code, RFID, GPS and sensors. Key value drivers include:

- **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 Chemical Industry Assets...**

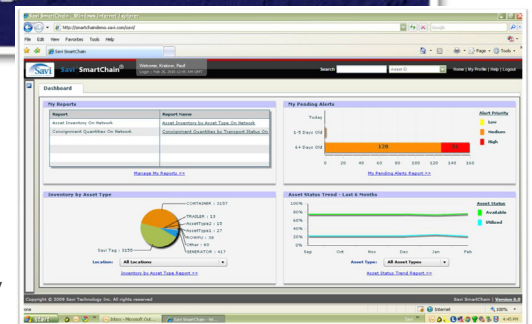
- Chemical tank rail cars
- Intermodal containers
- Cylinders
- ISO tanks

**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



Green dots depict asset movements, as displayed in SmartChain AMS.



SmartChain AMS 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](http://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](http://www.lockheedmartin.com).

**Contact Savi**

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

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