



SAS® Supply Chain Intelligence Solutions

*Maximize profits and increase customer satisfaction
with effective supply chain strategies*



SAS® provides the knowledge that enables intelligent decision making

The basic law of supply and demand has remained the same over time. Customers have a need or want, and products and services are made available to meet this demand. What has changed, though, are the events that occur during this cycle of supply and demand. Today, a myriad of vendors, customers, products and transactions make managing the supply chain complex.

Innovation has also affected the dynamics of the supply chain, which in turn affects consumer behavior, product quality, and an organization's profit margins. Improvements in technology have sped up production processes and made more products available. Globalization has increased production worldwide and created new price competition for suppliers. The Internet, discount warehouses, and trading exchanges have combined with more traditional channels, to give customers significantly more choices in product selection and needs fulfillment.

While technical advancements have created "more" of everything, including

the opportunity for organizations to increase revenues, new challenges have also arisen. Foremost, customer demand is driving the supply chain. Organizations have extensive inventories to track and move, a greater number of products to generate, quality issues to worry about, numerous suppliers to do business with, and an ever-increasing need to acquire, retain and satisfy additional customers to remain profitable.

To manage their supply chains better, companies are using operational and transactional systems to collect data about each link. These systems are effective at producing data, but not at providing the knowledge needed to formulate decisions that maximize profits and make firms more competitive. Companies are deluged with data, but are no closer to the truth. As a result, many organizations have abandoned complex, multi-million dollar IT projects because they failed to deliver promised ROI. In the meantime, their competition is moving full speed ahead and they still don't have a better understanding of their supply

chain or how to improve its performance. Companies need a set of solutions that will analyze every aspect of the extended supply chain and turn the available enterprise data into insight that can be acted upon to guide intelligent decisions.

SAS® Supply Chain Intelligence Solutions are a suite of analytical applications that integrate unique analytic insights, existing IT investments and operational data to drive revenue and reduce operational costs. From forecasting and pricing, to purchasing and replenishment, key analytical applications enable organizations to match profitability goals with strategically defined customer service and quality levels. SAS Supply Chain Intelligence Solutions enable you to streamline and manage your supply chain at its most basic level—satisfying your customers with high quality products and services, while maximizing your organization's profits.



Analytical Analytical



Get maximum value from your existing investments

With SAS Supply Chain Intelligence Solutions, your organization can leverage existing IT investments to drive analytics-based insight from your operational data, enabling you to:

- Deliver the right information to the right decision-maker at the right time.
- Anticipate customer demand by understanding buying cycles, market trends and competitive activity, as well as profitably shape demand through pricing and promotions, while ensuring high levels of customer service.
- Make profitable decisions through an improved understanding of costs across the extended supply chain.
- Exploit integrated data and drive problem solving, monitoring, control,

and improvement activities across the supply chain to improve product quality, reduce cycle times and time-to-market, along with increased throughput and asset utilization.

- Optimize your sourcing strategies to create a competitive advantage through lower supply-based costs and higher quality offerings.

SAS® delivers the intelligence you need for a competitive advantage

SAS' award-winning Intelligence Architecture delivers invaluable insights via industry-leading data management and analytics, providing your business with significant advantage over operational systems—the ability to create and fully exploit true supply chain intelligence.

SAS Supply Chain Intelligence helps your businesses drive revenue and reduce costs by anticipating customer demand, developing performance metrics, improving supplier strategies

and identifying actions that achieve targeted customer and quality service levels most efficiently and effectively.

Deliver insights you can act on

Improvements in supply chain performance can occur only when the right information is in the hands of the right decision-maker at the right time. SAS Supply Chain Intelligence leverages the SAS Intelligence Architecture to:

- Develop insights that lead to informed decision making in

targeted areas across the extended supply chain.

- Provide critical knowledge about your supply chain when and where you need it in your organization.
- Deliver a competitive advantage across critical areas of your extended supply chain operations, from procurement, manufacturing, and inventory planning, to distribution, demand planning and price optimization.



Leverage existing IT investments

Your organization has already made significant investments in existing operational and transactional systems. SAS Supply Chain Intelligence enables you to maximize your investment by giving you the power to extract more insight out of this operational data in order to:

- Drive ROI and more fully realize the value of your IT investments.
- Provide a holistic view and monitoring capability across the extended supply chain.
- Deliver targeted performance improvements.

Anticipate customer demand

When you have a better understanding of your customers' demand patterns, you can control inventory effectively and profitably. SAS Supply Chain Intelligence enables you to provide demand forecasts with unparalleled accuracy, allowing for optimized inventory replenishment and product pricing. By gaining a holistic view of customer demand, you can:

- Achieve market-driven planning.
- Meet consumer demand with greater profitability.
- Evaluate and compare alternative strategies and policies quickly and accurately.
- Ensure high customer service levels while minimizing costs.

Derive financial insights across the extended supply chain

In order to make the most profitable decisions for your business in the future, you need to have a complete understanding of what has been spent across your extended supply chain and why. SAS Supply Chain Intelligence provides a comprehensive understanding of these costs by enabling you to:

- Access detailed financial supply chain data at a granular level.
- Examine the mutual costs attributed to moving products through distribution systems from post-production to the final consumer with greater objectivity.
- Model "what if" scenarios of the financial consequences of decisions across critical areas of the supply chain.

Improve product quality, yield and time-to-market

Your company's success will hinge upon your ability to deliver products that the customer values. Quality, speed, flexibility and profit maximization are the four fundamental drivers you need to produce a valuable product, as well as thrive as a business. SAS Supply Chain Intelligence provides the tools to ensure product value, including offering a unified view of processes, product and equipment; a rigorous framework for historical analysis; tools for proactive analysis and action; a living archive of collective knowledge; and ready availability of knowledge to all contributors. As

a result, SAS Supply Chain Intelligence enables your organization to:

- Drive problem solving.
- Improve product quality.
- Reduce cycle times and time-to-market.
- Deliver critical knowledge to key decision-makers quickly.

Optimize supplier strategies

Offering a comprehensive and integrated solution, SAS Supply Chain Intelligence delivers substantial returns through procurement strategy alignment and scorecarding, opportunity exploration, and detailed analysis and decision support. As a result, your organization can optimize its supply-base management for a competitive advantage, allowing you to:

- Determine quickly how well the sourcing process is functioning within a department, division or organization.
- Align procurement activities with corporate goals and understand the impact these activities have on key performance indicators.
- Gain insight into how well your company understands its supplier landscape.
- Identify cost-saving opportunities in purchasing.
- Provide the intelligence necessary to monitor supplier activity and make smart decisions daily.



A supply chain solution suite that delivers ROI and satisfies customers

Beginning with an understanding of customer demand that provides the foundation for optimizing supply chain strategy, SAS will revolutionize how you approach your extended supply chain. By providing targeted analytic solutions that furnish new insight into the fundamental components of your extended supply chain, including demand, pricing, inventory, quality, product-level costs, and supplier relations, the SAS Supply Chain Intelligence suite provides the power your organization needs to meet customer demand, target service levels and maximize profits. The end result is that you shift your objective and broaden your perspective, from minimizing silo-based supply chain costs to maximizing customer value and enterprise-wide profitability.

SAS® Supply Chain Intelligence suite

SAS® Demand Intelligence

SAS® Demand Intelligence provides an in-depth understanding of demand by connecting all the related processes of demand forecasting, replenishment planning and price optimization, enabling you to accurately predict demand, increase inventory turns, increase your gross margin, minimize expenses and increase profits. SAS Demand Intelligence is comprised of three solutions: Demand Planning, Inventory Replenishment Planning and Price Optimization.

- **SAS® Demand Planning:** SAS® Demand Planning produces statistically sound large-scale demand forecasts that will serve

as the foundation for all levels of your business' planning. SAS Demand Planning adjusts to irregular demand series or takes promotions into account, while automatically generating statistically advanced forecasts for every item at every level of detail. Because each forecast is individually calculated using patent-pending optimization techniques, you get a clearer picture of demand even at the granular level. Accurate, large-scale forecasting is the first step to anticipating and meeting customer demand.

- **SAS® Inventory Replenishment Planning:** With SAS® Inventory Replenishment Planning, you can develop better replenishment strategies for repeatedly ordered, fast-moving items and materials. This solution builds on the forecasts produced by SAS Demand Planning and considers the question of how inventory should be replenished to meet the forecast demand at

desired service levels. The focus is on fast, accurate calculation and evaluation of inventory replenishment policies determining when each item should be reordered and in what quantity. Replenishment can be planned at any level of detail, ranging from strategies across all categories down to item-by-item plans, and multi-scenario analysis enables you to explore and compare different options. With optimal decisions, you meet targeted demand at the lowest cost.

- **SAS® Price Optimization:** SAS® Price Optimization provides optimal pricing strategies that take into account your organization's unique goals and objectives. A range of pricing strategies can be tested and validated. The solution also incorporates all relevant business constraints, helping you understand the ramifications of both short- and long-term pricing actions.





Intelligence Intelligence

SAS® Value Chain Analytics

As organizations do their best to keep costs down in this tight economy, they often end up shifting costs around instead of actually reducing them. In many cases, because supply and value chains are so tightly integrated, one company's cost reduction may become a trading partner's cost increase. Though most companies have already identified and implemented the obvious changes needed, SAS® Value Chain Analytics provides the granular information to help organizations make decisions that will continue to improve performance, as well as the ability to look outside their own operation in order to achieve maximum benefits. SAS Value Chain Analytics enables your business to:

- Gain access to financial intelligence at a granular level.
- Make fact-based decisions for reducing costs and improving profitability based on the intelligence gathered.
- Empower internal departments and/or external trading partners to objectively examine, via a common interface, the mutual costs attributed to moving products through distribution systems from post-production to the final consumer.

SAS® Process Intelligence

Exploit integrated data and drive problem solving, monitoring, control and improvement activities that align with value creation across your enterprise, all from a single, integrated vantage point—resulting in reduced cycle times and time-to-market, increased product quality and throughput, and better asset utilization. SAS® Process Intelligence delivers a flexible, extensible platform for intelligent processes that contains five essential elements:

- A unified view of processes, product and equipment.
- A rigorous framework for historical analysis.
- Tools for proactive analysis and action.
- A living archive of collective knowledge.
- Knowledge that is readily available to all contributors.

SAS® Supplier Relationship Management

SAS® Supplier Relationship Management provides full intelligence support to procurement organizations, providing opportunities to optimize their supply base management strategies in order to create a greater

competitive advantage. Knowledge of supplier capabilities and participation in the make-or-buy process can provide essential information to management, especially in the manufacturing segment of a firm's operation. Procurement and supply chain activities cut across all departmental lines—and, consequently, the function is the hub of much of the firm's business activities and profitability. SAS SRM is a comprehensive, integrated solution that helps you achieve substantial returns through three main areas of procurement:

- Strategy alignment and score-carding.
- Opportunity exploration.
- Detailed analysis and decision support.



The SAS® Intelligence Advantage

With the challenges of today's competitive marketplace, it is imperative that scarce resources are focused on the strategies most likely to result in success. When you implement SAS Supply Chain Intelligence Solutions, SAS can help you achieve this focus.

SAS leverages the investments you've already made in operational/transactional systems and applications by adding a layer of intelligence you can't get anywhere else. SAS offers an integrated set of data management and analytical solutions that, when coupled with our world-class consulting services, give your organization the power to transform raw data—from any source and across every channel—into performance-driving intelligence.

Because all SAS solutions rely on the same open, extensible framework—the Intelligence Architecture—your organization is assured that individual solutions can be easily linked and that decision-makers can quickly obtain

high quality, reliable information they can act upon with confidence.

SAS Supply Chain Intelligence Solutions provide competitively differentiating value across key areas of your extended supply chain operations, from procurement, manufacturing, and inventory planning, to distribution, demand planning, and price optimization. By translating supply chain targets into performance metrics, SAS supplies the means to achieve these goals. Only with SAS, the undisputed market leader in analytical intelligence software, including award-winning analytics and data access/warehousing applications, can our customers create and fully exploit true supply chain intelligence.

To help realize SAS Supply Chain Intelligence, our expert supply chain business consultants are available to provide a full range of solution implementation and customized consulting services to address the key needs in your organization.

Whether you're focused on one facet of your business or committed to improving performance throughout the enterprise, SAS Intelligence can help your organization infuse decision making with the knowledge necessary to maximize profitability, minimize risk and achieve competitive advantage.

Solutions from SAS, the world's largest privately held software company, are used at more than 39,000 business, government and university sites around the world. Customers include 98 of the Fortune 100 and 90 percent of Fortune 500 companies. For more than 25 years, SAS has been giving our customers *The Power to Know*®. For more information, visit www.sas.com.

Advantage





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