INVENTORY MANAGEMENT

How Manufacturers Can Leverage Data Analytics & KPIs to Drive Inventory Optimization

Driving The Intelligent Enterprise

Silvon®

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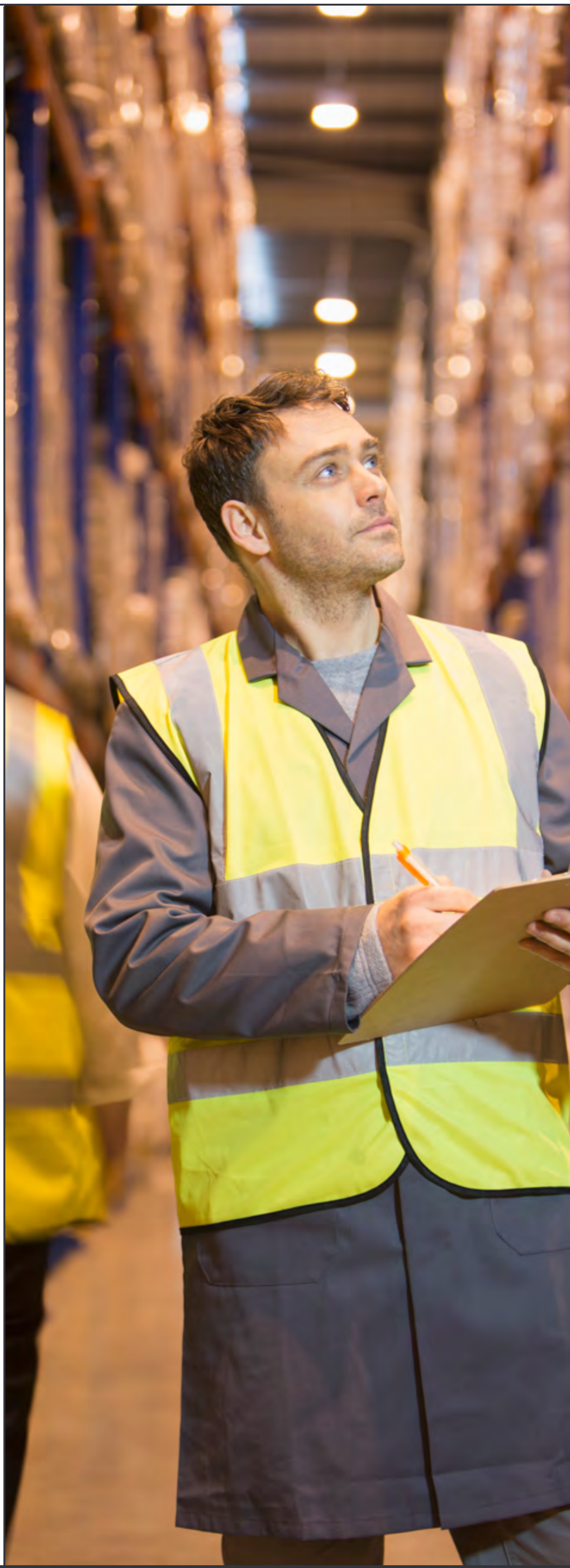
Introduction



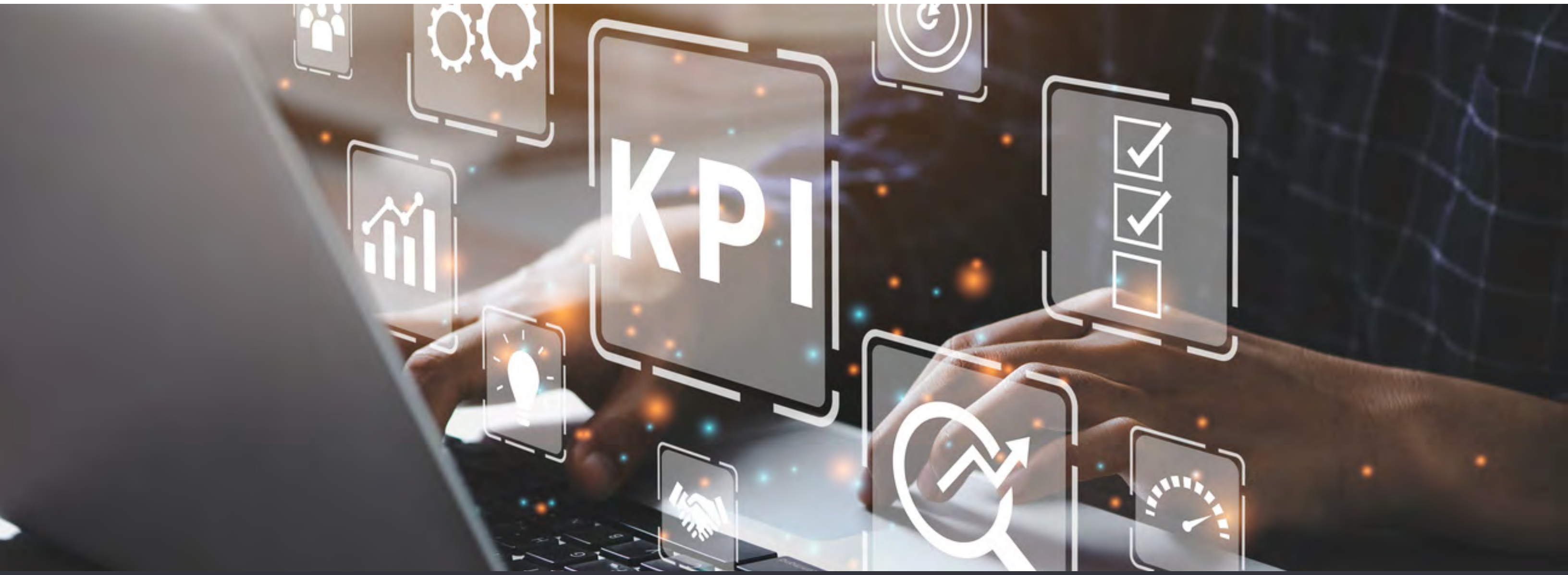
Inventory can be a manufacturer's most important asset. Too little of it when and where it's needed can create unhappy customers. But a large inventory has its own liabilities such as cost to store and insure it, along with the risk of spoilage, theft and damage. Organizations looking to use less capital while maintaining a saleable inventory employ optimization best practices to balance their investment constraints against their business objectives and stock-keeping unit (SKU) fulfillment targets.

A few key components to a successful inventory optimization process include the ability to account for uncertainties in supply and demand; to oversee supplier lead times, delivery patterns and schedules; to track changes in buyer behavior; and to factor in seasonality and promotional campaigns. Key performance indicators (or KPIs) help to facilitate these requirements and drive higher inventory optimization outcomes as a result for manufacturers, distributors and other supply chain-centric businesses.

The Basics of Inventory KPIs

Key performance indicators (KPIs) in inventory management are metrics that help you monitor and make decisions about your stock. In inventory management, KPIs matter because they offer information about turnover, sales, demand, costs and more. They can help to increase sales and revenues, make the business financially competitive, improve customer satisfaction, reduce operating costs, eliminate supply chain issues, and ensure that marketing and merchandising are effective.

In an effective KPI strategy, we always recommend that leading indicators that help provide insight into future performance should be balanced with lagging indicators that tell companies how they've done. We also suggest to our manufacturing and wholesale distribution clients that they keep the following basic principles in mind relative to their KPI strategies.



The Basics of Inventory KPIs (Cont'd)

Every inventory KPI needs a clearly defined goal. This goal needs to be something that can be numerically defined (quantitative not qualitative) and attainable in a reasonably finite period of time.

It is very important that you are able to objectively measure your progress toward the goal by collecting and interpreting data.

There also must be a clearly defined data source with a standardized process for collecting and measuring the data.

To accomplish this, our clients rely on the built-in data hub of our Stratum reporting application. The data hub collects, organizes and stores data from multiple sources and serves as a single version of the truth for helping our clients analyze performance KPIs and metrics across their businesses.

While there are many inventory KPIs and metrics in use today, we are presenting some of the most effective ones that Silvon has deployed for manufacturers and wholesale distributors over the past 25+ years.

Sales KPIs

Sales KPIs are influenced by your customers' actions and let you know how your inventory is affected.

Available to Promise – allows a business to store the minimum amount of a given product so that use of inventory space is efficient.

Inventory Turnover – is a good indicator of efficient production planning, marketing and sales management. Most high-performing businesses tend to have inventory turnovers between 5 and 10.

Demand Forecast Accuracy – is a percentage of how close the actual on-hand quantity is to the forecast. Using this KPI as input for determining target inventory levels is key to inventory optimization.

Average Time to Sell - provides useful information about storing processes and can be used in formulating procurement strategies. Ideally, this KPI should be as low as possible.

Days On-Hand – is a ratio that shows how many days, on average, it takes a company to sell its inventory. The lower this number is, the better, because it results in lower carrying costs and less cash tied up in inventory.

Weeks On-Hand – is an essential, time-based metric that quantifies inventory investment and weeds out any roadblocks to shipping an item on time to its final destination.

Categorizing inventory KPIs by business operation type lets leaders focus on areas in need of change so they can implement process adjustments and track improvements.

These types of metrics are:

***Sales** KPIs*
***Operational** KPIs*

Sales KPIs (Cont'd)

Inventory to Sales – Also called stock to sales radio, this inventory KPI is one metric that's helpful for evaluating potential overstocks. Combined with the inventory turnover or carrying cost of inventory metric, it provides a better picture of financial stability.

Sell Through Rate – indicates how much inventory was sold over a specific period of time. This KPI varies by company and industry, but in general a rate above 80% is good.

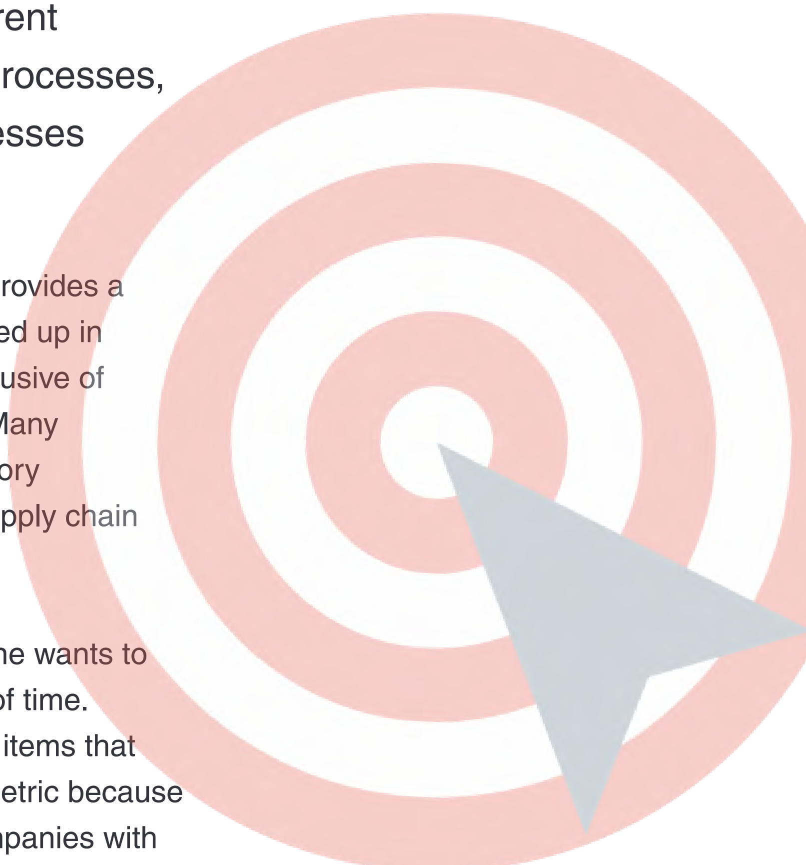
Backorder rate – is an effective way to monitor goods or items that can't be filled once a customer order has been placed. Businesses can use this metric to advantage by setting a definitive fill rate target and tracking progress over a weekly, monthly, or annual basis.

Product Sales – is the income from customer purchases minus any returns, canceled sales, discounts and allowances. This KPI is normally reported on a monthly or annual basis.

Cost per Unit – represents how much a single unit of product costs a company to produce or buy and is most used in companies that manufacture and sell large amounts of a single product.

Gross Margin by Product – is the amount of money a company keeps per dollar of sales, removing any costs from producing the item.

Operational KPIs



Operational KPIs are used in different industries to track organizational processes, improve efficiency and help businesses better understand the insights.

Average Inventory – is useful because it provides a window into how much money is typically tied up in inventory at any given moment in time, exclusive of seasonal fluctuations and other variables. Many companies use this metric to assess inventory shrinkage in order to prevent any further supply chain losses or inefficiencies.

Dead Stock / Spoilage – is inventory no one wants to buy and that cannot be sold after a period of time. Spoilage is the same concept, but for fresh items that have expired. Dead stock is an important metric because it indicates the company's viability, and companies with more than 25-30% of it generally are not competitive.

Fill Rate – simplifies inventory forecasting and helps to spot the bullwhip effect whereby customer demand is greater or less than anticipated. With this KPI, a company can adjust its procurement strategies to reduce financial losses.

Inventory Accuracy – is critical for preventing stockouts, shortages, shrinkage, controlling inventory quality, and maintaining a positive customer experience. This KPI measures the difference between warehouse stock records and by-hand inventory counts. Shooting for a ratio of 92% is recommended!

Operational KPIs (Cont'd)

Inventory Carrying Cost – is the percentage of total value paid by a company to maintain inventory in storage. Carrying cost is generally 20% - 30% of inventory value, making it an essential factor to account for and monitor.

Inventory Shrinkage – is the amount of inventory a company should have on-hand but cannot account for, usually resulting from theft, damage, miscounts or fraud.

Lead Time – is the time it takes for a customer to receive a product after they order it, indicating overall supply chain efficiency.

Lost Sales Ratio – shows when a company is running too lean with inventory by highlighting the number of days a product is out of stock compared to expected sales for that product.

Order Cycle Time – demonstrates how well a business meets demand, including product readiness, shipping and delivery.

Order Status – tracks the real-time status of orders and categorizes them by actions taken, like “backordered,” “on hold,” or “shipped.”

% of Products Sold Within Freshness Date – helps businesses pinpoint the products or items that might need better quantity management or merchandising.

Perfect Order Rate – is a measurement of how many orders a company ships without any issues like damage, inaccuracies or delays.

Reorder Point – is the inventory level at which an order is triggered to replenish the inventory stock. The reorder point generally connects the following metrics: sell through, lead time, and level of safety stock.

Safety Stock – sometimes called buffer stock, is a term used by inventory managers to describe a level of extra stock that is maintained to mitigate risk of stockouts or shortfalls in raw material or finished goods.

Service Level – is a metric that addresses the percentage of customers who do not experience stock-outs. This metric is used to balance excess inventory costs with costs related to not having enough inventory to fulfill orders.

Stock-Outs – is the percentage of items not available in inventory when a customer places an order. This metric can help to identify the factors that lead to stock outs, including underestimated demand, supplier delays, production delays, delivery issues, and more.

The Silvon Advantage

Silvon helps mid-market manufacturing and wholesale distribution companies accelerate growth through our suite of financial and operational planning, reporting and analysis applications. Our analytics are powered by a data hub that unifies and refines information from across your systems, ensuring it's accurate, consistent, and ready to be reported on.

See how we can help you execute your KPI strategy and all of your performance reporting initiatives from the C-suite to your production and distribution facilities.

Contact Us Today!

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