

How to create a reliable supply chain for today's hyper-connected world

Part One: Improving your sales planning and optimizing inventory



Introduction

When it comes to supply chains, you're only as strong as your weakest link. The COVID pandemic highlighted this fact for many manufacturers and distributors. Even as the world scrambled to deal with its fallout, supply chains were battered by material scarcities, plant shutdowns and global tensions that put pressure on trading relationships.

And although the pandemic underscored the vulnerability and complexity of many supply chains, it is certainly not the only threat. Natural disasters, trade wars, labour strikes and civil unrest are just a few of the ongoing challenges to your supply chain – particularly if you source globally.

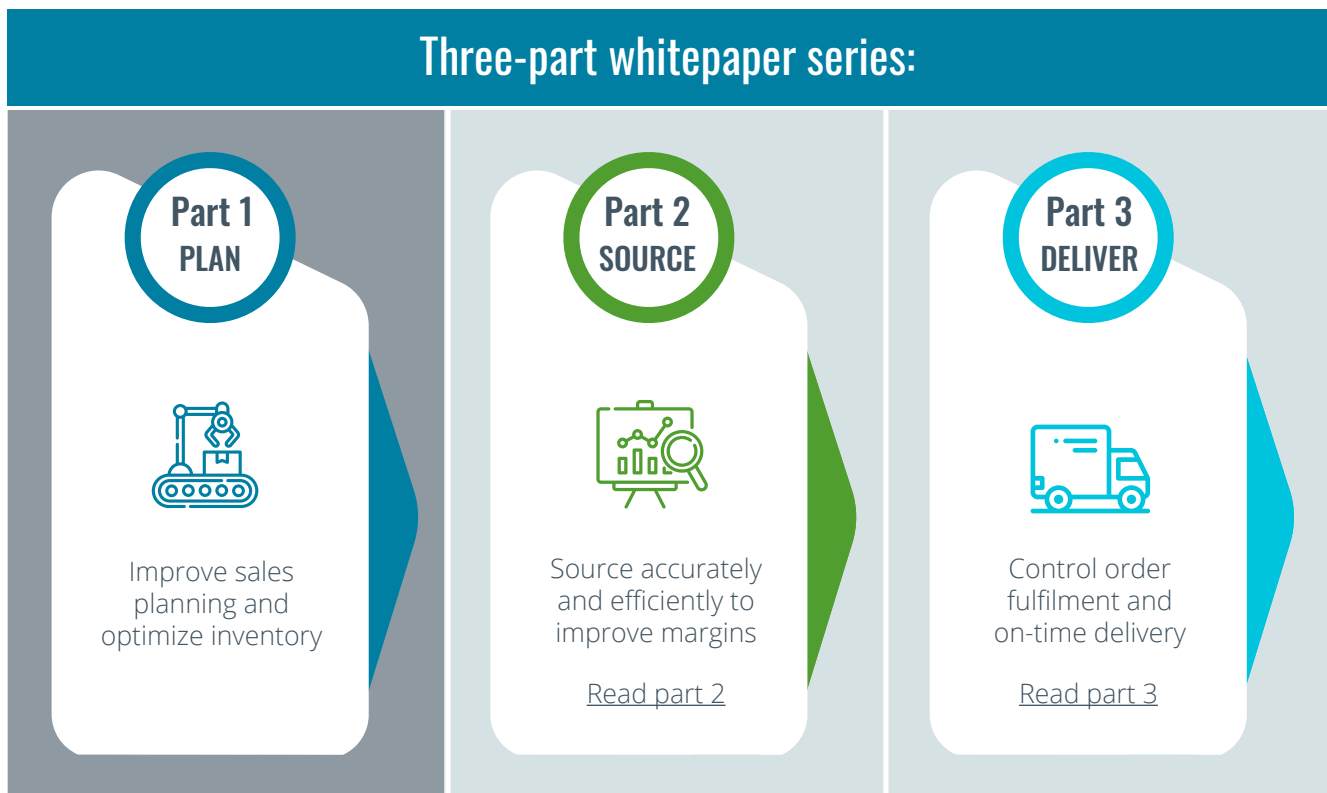
The problem: even as disruptions become more common, the need for manufacturers and distributors to build reliability and predictability into their supply chains has become more crucial with the rise of e-commerce.

In the next three years alone, analysts expect e-commerce to generate \$1.6 trillion in revenue globally: \$330 billion of that in the U.S. alone. That translates to tremendous opportunities for a company like yours; but it spotlights existing challenges.

It's estimated that every \$1 billion of online sales requires about 1.3 million square feet of warehousing space, according to real estate specialist CBRE's 2021 Market Outlook Report. Consequently, as e-commerce soars, so does the cost of warehouse space. Prices per square foot have climbed steadily higher in recent years, and labour costs have burgeoned.

Getting a handle on your supply chain and your inventory becomes ever more crucial if you are to keep warehousing costs in line and yet ensure you have enough inventory to meet customer demand.

This white paper is the first of a three-part series that aims to show you how leveraging the power of new digital technologies such as Enterprise Resource Planning (ERP) software can help you effectively plan, source and fulfill orders, adding strength and reliability to your supply chain in the process. Part one deals with the planning aspect of an effective supply chain and how your manufacturing business can optimize inventory with better forecasting.



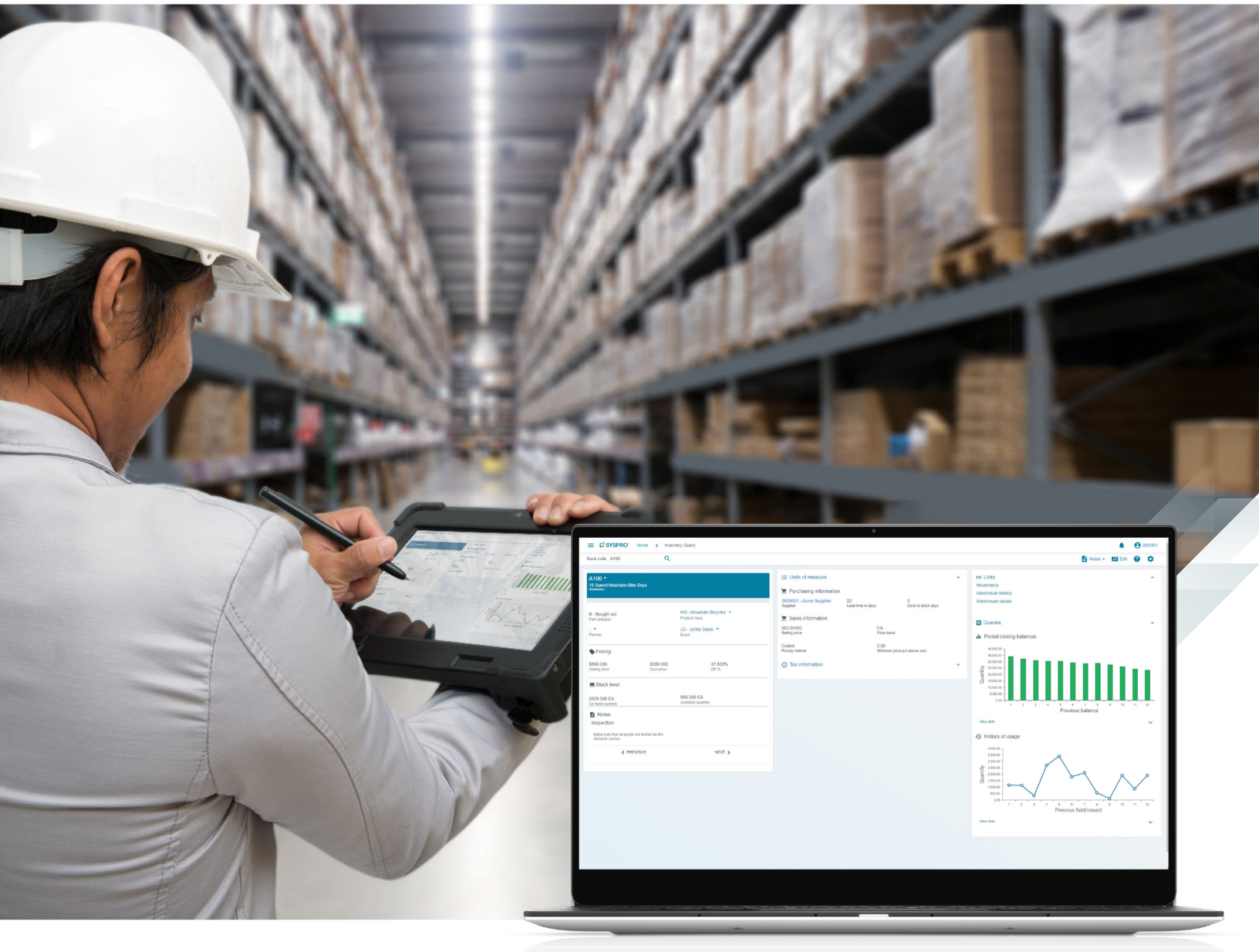
Why forecasting is important

Every day, your organization makes difficult decisions about which supplies to stock at each of your warehouse locations, as well as when to replenish that inventory and where to source supplies. In the process, you must strive to weigh two separate but competing goals. First, you need to have sufficient inventory on hand to manufacture product or respond to customer demand fast. Simultaneously, you need to minimize transportation, warehousing and storage costs.

If you over-stock, you put pressure on cash flow (in many companies more than 50 percent of capital is tied up in inventory). When products don't turn over quickly enough, you over-spend on warehouse costs and run the risk that your inventory will be damaged or become obsolete while awaiting a buyer.

By understocking, on the other hand, you risk lost sales or face production issues resulting in unhappy customers. Even if you're able to expedite purchase orders to satisfy customer demand, you frequently incur extra costs for rush shipments and warehouse overtime.

An accurate sales forecast is the first step in creating a more reliable supply chain and optimizing inventory because it tells your procurement department not only what to order, but how much and when to order it.

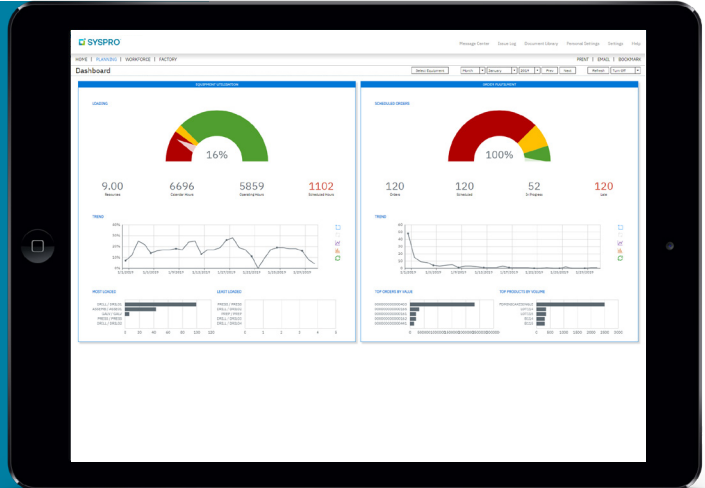


Infuse some science into your forecast

If you're like many small or mid-sized businesses, you probably rely on a mix of intuition and experience to fuel your forecasts. And the more products you carry, the more complicated it becomes to forecast. In a nutshell, your crystal ball is a bit foggy.

THE GOOD NEWS

By using sophisticated tools such as data analytics, an ERP system (software organizations use to manage day-to-day business activities from shop floor to top floor), can also leverage historical data on your company's sales to predict future sales, as well as mine insights about your products that can help the bottom line.



For starters, an ERP can help you reduce the 'gut feel' factor in creating a sales forecast by easily graphing historical sales for a specific product or a grouping of products – an exercise that often begins to reveal important information.

For example, you can easily determine if your product is subject to seasonality - time periods that fuel a rise or decrease in demand for your product. And by comparing year-over-year sales trends you might determine there is an upward trend you need to take into account. So, if sales tend to rise by 10 percent per year, you should probably build that rise in demand into your forecast.

You can also identify which of your products contribute most to the bottom line. You may assume, for example, your top-selling products are your most profitable. But you could be dead wrong. An effective ERP system allows you to quickly perform a Pareto analysis. Instead of looking at the sales quantity of your SKUs for a specific time period, the Pareto Analysis looks at the value of those sales to your business.

It can, for example, tell you which products (or classes of products) generate 80 percent of your revenues. You may discover that some high-volume items generate low margins, or even cost you money (perhaps because they're loss leaders or they're bulky and take up scarce warehouse space). Lower volume items, on the other hand, may actually contribute more to your bottom line than you realize.

With cold, hard data at your fingertips, you can make effective decisions to enhance your business's overall profitability. For example, you may choose to slow or even stop production and marketing of low-margin products in order to focus on products that yield healthier margins. The result: reduced carrying costs for your business and therefore higher profits.



Reduce forecasting errors

Forecasting errors are inevitable; after all, you can't predict every single thing that can affect your company's sales performance, but it's critical to minimize forecasting errors as much as possible. Why? Because, as a rule of thumb, the more errors you make, the greater the likelihood your company will over- or under-stock materials and supplies.

Forecasting errors frequently creep in because sales forecasts tend to assume the same demand for the same items at the same time and in the same quantity each year. They have trouble accounting for outliers – basically blips in demand such as a sudden short-term rise in sales caused by a specific marketing promotion or a brief dip resulting from supply issues.

An effective ERP system makes it easy to review the accuracy of your sales forecast and refine it by comparing what actually happened to what you forecasted would happen. You can delve into anomalies in the forecast by slicing your data to look at specific stock codes or groupings and classes (for example: by warehouse, by supplier, by groupings of products). With such information at your fingertips you could:

- Manually eliminate outliers or anomalies from the forecast if you believe they were caused by a one-time event
- Pinpoint problems, such as a downward trend in sales caused by the advent of a new competitor, or a supplier who was unable to get products or materials to you on time

Ultimately, armed with cold, hard data, you can make better decisions for your business.



Share forecasts to keep your whole team aligned

An accurate forecast provides the foundation for your company's ongoing success and gives your team goals to work toward with benchmarks to check against performance. It can enable savvy decision-making, inform budgets and identify threats to profitability. Of note, an ERP-generated forecast is different from a traditional sales forecast which would typically go out to senior management and act as an estimate for future sales. Though it can help with sales, the primary purpose of an ERP-generated forecast is that it can be used as a source of demand for inventory planning.

One of the biggest benefits of an ERP system is that it acts as a central repository of data that can be shared across all departments. So, a forecast, for example, can be shared automatically with departments such as Procurement, Finance and Marketing to help ensure your team is aligned. This improves productivity, performance and efficiency.

But there lies another problem. If you've ever been faced with several hundred emails after a long weekend, you'll be well aware of the down-side of information overload. As early AI guru Herbert A. Simons once mused, information "consumes the attention of recipients," and "a wealth of information creates a poverty of attention." So how do you make all that information accessible and compelling for those who need to pay attention?

When it comes to forecasting, an effective ERP system doesn't simply compile data, it connects and analyzes that information to offer actionable insights delivered in the form of easily conceptualized graphs, charts, reports and dashboards.

With the click of a button, you can share pertinent info with departmental teams to make sure everyone is on the same page. For example, your procurement department can determine what supplies to purchase, when they need to be ordered and which suppliers to engage with. Financing can adjust cash flow accordingly, and marketing can focus on promoting higher-margin products.

When your manufacturing company is able to create an effective sales forecast you can:



Reduce the 'gut feel' factor in forecasting and identify seasonality and other factors that impact demand for each one of your products.



Identify which of your products contribute most to the bottom line.



Access comprehensive information and insights that allow you to continuously refine and hone your sales forecast.



Share relevant information to keep your team aligned.

By providing pertinent, timely and accessible data-driven analysis in a readable format, your forecast enables you to take the first step toward accurately assessing how much material or components you need to have on hand to meet demand and maximize profitability, even during volatile times.

About SYSPRO

SYSPRO is a leading, global Enterprise Resource Planning (ERP) software provider specializing in key manufacturing and distribution industries. For over 40 years, SYSPRO's team of specialists have continued to address unique industry needs and enable customers to easily adapt and grow. The solution is scalable and can be deployed in the cloud, on-premise, or both, and accessed via the web on any device to provide customers with choice and flexibility.

SYSPRO remains focused on the success of partners and customers. Our evolving solutions are aligned with industry trends to leverage emerging technology that will enable partners and customers in securing a digital future.

With more than 15,000 licensed companies in over 60 countries across six continents, SYSPRO offers guidance and support every step of the way as a trusted advisor.

For more information, visit [syspro.com](https://www.syspro.com)

[Click here](#) to learn how you can optimize your manufacturing or distribution business by requesting a free, customized product tour.

Three-part whitepaper series.

Part 2 of this series of whitepapers aims to explore how manufacturers can gain control over their supply chain, allowing them to improve margins and ensure the right materials are available for production with the help of the Material Requirement Planning (MRP) functions of an ERP. Click [here](#) to read part 2.





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