

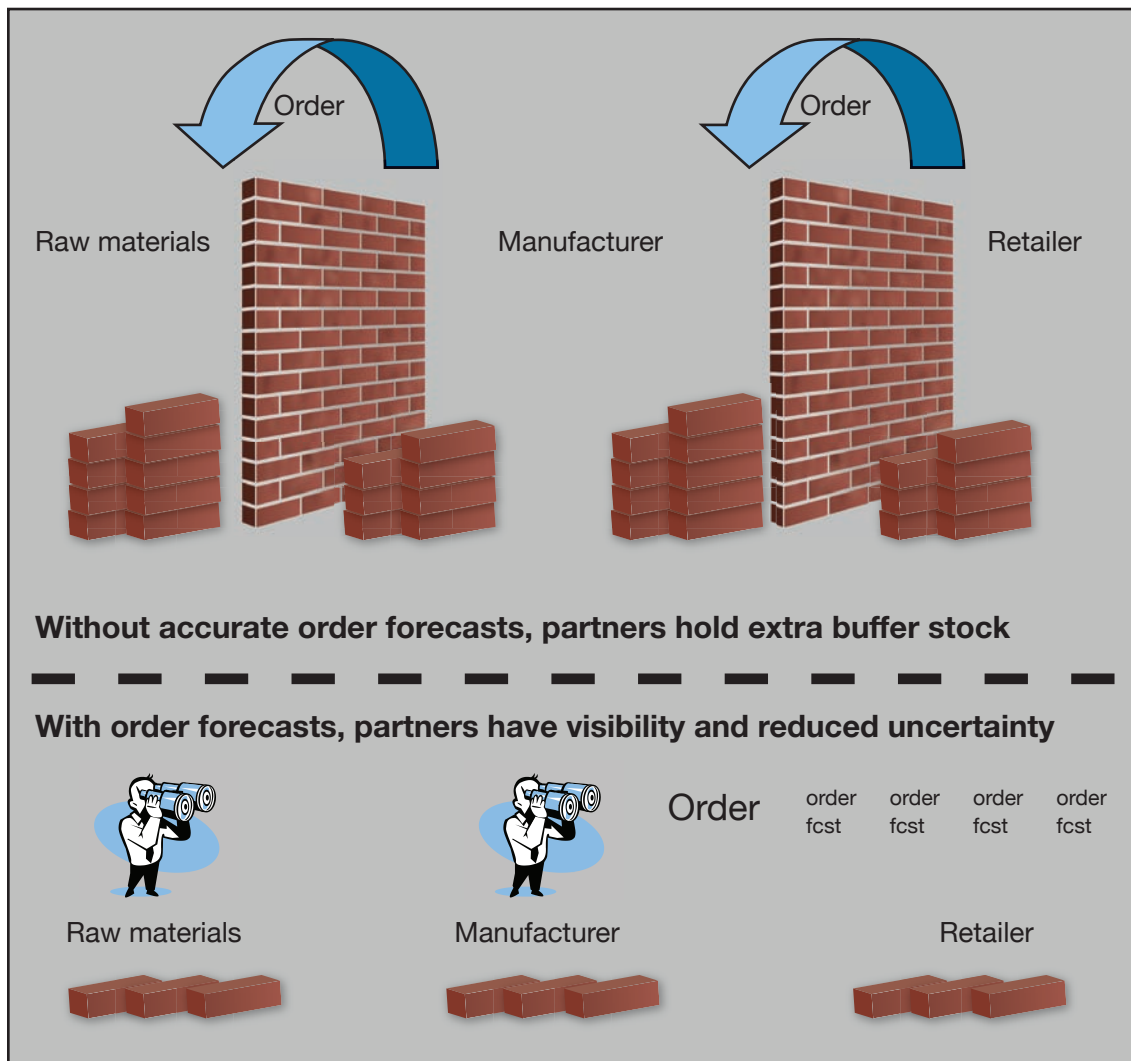


Benefits of Order Forecast Accuracy

Improving the accuracy of order forecasts and sharing the information throughout the demand chain increases sales, removes unnecessary inventory and increases planning time.

Accurate order forecasts enable raw materials suppliers and manufacturers to better meet the needs of the end consumer. Production plans can reflect the anticipated order flow and fill rates will increase. When the retailer is able to procure the product needed to meet the end consumer demand, service levels improve and sales for all members of the demand chain increase.

In addition to increasing sales for all members, buffer inventory levels throughout the entire system are greatly reduced. Without visibility to upcoming orders, partners must prepare for the largest order received lately or risk losing sales. When partners prepare for the unknown by holding additional product, buffer inventories grow.





Because much of the supply and demand variance is removed with the introduction of accurate order forecasts, the safety stock inventory necessary to hedge against uncertainty is reduced. With the risk of unusually large orders being received without notice removed, buffer inventory can be reduced and profitability increased.

Collaboration on order forecasts enables changes to forecasts to be immediately visible and actionable. For example, once a raw materials supplier knows of a shortage in a key product component, that information can be shared with the demand chain partners through order forecast collaboration. If alternative sources for the component are unavailable, the retailer can immediately decide what consumer drivers such as price, promotion, product placement or in-store signage should change to reduce demand and more closely match the upcoming reduced supply. Without order forecast collaboration, the first time a retailer may know of a raw materials shortage is when expected orders are received incomplete at the warehouse dock.

Finding a Solution

Demand chain partners need to work together to accurately estimate the order forecast variable that drives the majority of interactions between partners. Order forecast collaboration is best addressed with use of a software solution. While demand chain partners can create their own tools and processes, solutions such as JDA®'s Electronic Dynamic Agreement already have proven successful in the retail arena.

Whether using an existing tool or creating a new one, the ideal order forecast collaboration tool:

- Creates item order forecasts as far into the future as is actionable by the partners.
- Leverages the same logic and rules as actual purchase orders.
- Self-adjusts order forecasts within preset tolerances as market conditions change.
- Supports user collaboration on order forecasts with ability to propose manual changes.
- Links to execution by creating purchase orders from order forecasts.
- Measures accuracy of the order forecasts compared to actual orders placed.

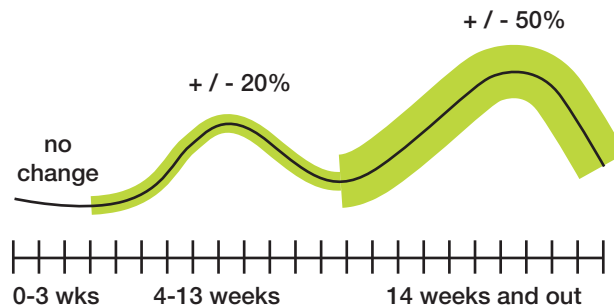
Order forecasts are driving item production decisions and the upstream procurement of raw materials. Because of these item level activities, order forecasts should be created at the item level. In addition, order forecasts are only actionable within a certain timeframe that is unique to each partnership. Creation of several years of order forecasts may prove useful for the long term planning teams at a manufacturer or retailer, but the time and effort to create these accurate order forecasts often outweighs the benefit of planning accuracy. Larger gains from order forecasts are realized when partners make actionable decisions such as purchasing raw materials or beginning production of certain product lines. These decisions are most often made several months – not years – ahead of expected delivery.

Too often shortcuts are used that create order forecasts differing from actual order patterns. Order forecasts must use the same logic as actual orders. If forecasts are based on a different set of logic than the real purchase orders, avoidable variance has been introduced into a process where the intent is to predict future actions with reduced error.

In addition, order forecast collaboration should minimize manual intervention and workloads by automating forecast updates within tolerances and notifying users of changes desired outside of tolerances. These tolerances should vary based on the time remaining before an order forecast becomes an actual purchase order and ships to the retailer.



In the example below, order forecasts may have an allowable variance of 50% when the order forecast is 14 weeks or further away from shipment. That variance level may reduce to 20% when forecasts are four to 13 weeks away from shipping and orders three or fewer weeks away from shipment may have all automated forecast adjustments locked.



Even with automated adjustments within tolerances, there will be times when partners need to manually change the system-calculated order forecasts because of information not available in the system. Plant closures and out of stock situations are common examples of business conditions impacting order forecasts.

Partners need to easily collaborate on these known issues and order forecast collaboration solutions should support a request and approval process for changes. This enables demand chain partners to collect all useful supply and demand information in one place yet still preserve order forecast accuracy measures.

Order forecasts should also drive actual order quantities. If trading partners have adjusted system quantities over the past few months on order forecasts they will build inventories and sales plans supporting those decisions. If actual orders are generated that are not reflective of these order forecasts, order forecast accuracy decreases and trust in the systems is lost. When order forecasts use the same logic as orders, solutions can enable a direct link to execution by turning order forecasts into actual purchase orders when receipt requirements move within a lead time.

The End Result

Order forecast accuracy measures reflect how closely actual orders match the order forecasts used to prepare for the actual orders. Without a high accuracy, partners will not take action on the forecasts and benefits are lost. Accuracy measures must account for both quantity variance and timing variance. These variance measures should use standard statistical formulas (such as MAPE – Mean Absolute Percentage Error) and should be measured over different time intervals that carry meaning for demand chain partners.

For example, if an October shipment has been forecasted to be 1000 units for the past three months the demand chain may order raw materials and schedule production time to support the upcoming order for 1000. If the retailer actually orders only 250 units and does not notify the supplier until the PO is cut, demand chain partner faith in future order forecasts is lost.

Order forecast collaboration focuses partnership efforts on the most critical forecast component across the demand chain. Accurate order forecasts drive sales increases, inventory decreases and better decisions. With so many benefits across the entire demand chain, shouldn't you look into order forecast collaboration with your partners?



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