

## RS Components Wholesale Distribution



- Needed very powerful statistical forecasting and SI&OP
- Order-line data provides probabilistic assessment of repeat orders
- Quickly reduced inventory by \$ millions, with same service level

### Project & Objectives

RS Components has a complex and dynamic supply chain. Each business day, more than 40,000 deliveries are shipped the same day they are ordered. Operations in 30 countries generate annual revenues of more than \$2.5 billion. Distributors in 38 countries further extend the company's global reach.

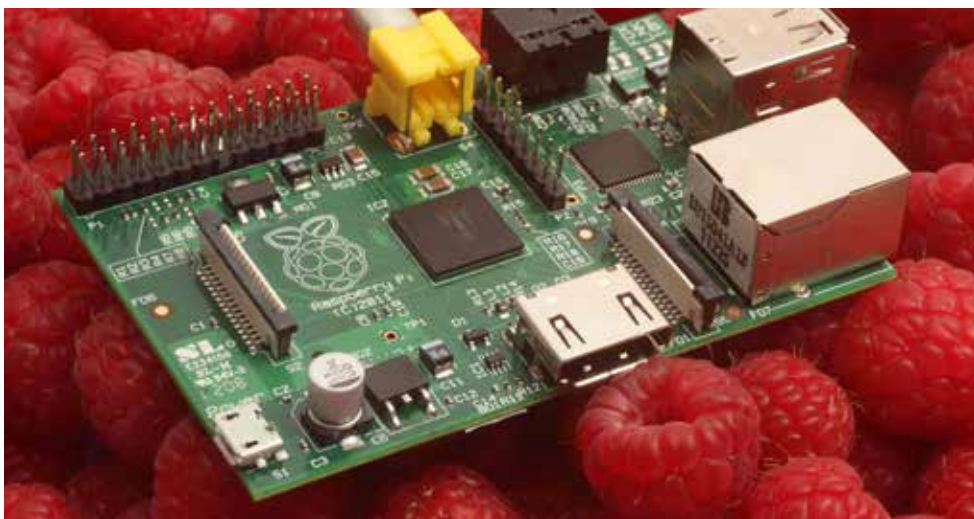
The company's business became even more dynamic during the downturn. The company went from 9% growth to 17% decline almost overnight. Some product categories were down more than 75%. Then, just as suddenly, the 17% decline changed to 25% growth, again almost overnight.

During the downturn, the supply chain team had significantly reduced inventory and capital costs. Now that the market had turned around, they needed to support this new growth without undoing their previous good work. The plan was to create new business processes and systems that would allow them to achieve a sweet spot of maximizing customer service while minimizing working capital and operating cost. Fortunately, the dramatic changes of the past few years helped in one way; by creating a burning platform for a change agenda.

RS Components is the world's largest distributor of electronics and maintenance products serving 1.5 million customers worldwide. Through operations in 27 countries and 17 warehouses, RS distributes around 500,000 products from over 2500 suppliers.

*"SO99+ does not require you to be an expert in statistics in order to use it, which is most critical."*

- **Andrew Lewis,**  
**Head of Global Supply Planning,**  
**RS Components**



RS implemented an S&OP (Sales, Inventory & Operational Planning) process. According to says Andrew Lewis, head of global supply planning, “We deliberately chose to have an SI&OP process rather than an S&OP process. Inventory is not waste, unwanted or an accident in our business it is fundamental to our business model as a distributor.”

RS further focused on obtaining a system that would drive the forecast and safety stocks. “To have a credible SI&OP process, you must start with a credible forecast,” says Lewis. They decided that the best way to achieve this goal was through a demand planning process based on “input by exception”. A draft statistical forecast was created, to which the sales team adds their input. To sum up the reasoning behind this approach, Lewis quotes Jay Vandebree, President at Sony Consumer Sales as saying, “My sales force turned out to be the world’s worst forecasters, but the world’s best adjusters.”

As their Demand Planning and Inventory Optimization platform, RS chose SO99+ from ToolsGroup. They were looking for a very powerful statistical forecasting engine and also wanted a solution that could make a probabilistic assessment of the chance of repeat orders by looking at order-line data.

Lewis explains, “SO99+ keeps track of the number of order-lines placed to reach the total quantity; this is because it functions on the basis of order-lines rather than cumulatively. This means that selling a product in a bulk order of 12 and selling that same product individually 12 times triggers different stock policies. In the second case, we will stock six. In the first case, whether or not we stock the product will depend on the likelihood of receiving another order of 12 in the relevant period.”

### **...Day to Day**

Following several intensive months of business preparation and simulations to understand fully the implications, SO99+ is now driving all inventory purchase orders across Europe. It is calculating an 18 month forward view of demand based on three years of demand history at an order level. SO99+ does the forecasting and safety stock calculation, then feeds this into the original Manugistics system to trigger replenishment ordering.

Why replace the Manugistics forecasting? According to Lewis, they were previously only getting the best algorithm for about 20% of the products, and excluded about 30% of demand from its forecasting calculations, as demand was too low.

“With SO99+, 99% of product demand is taken into account, leading to better forecasts,” says Lewis. He adds that SO99+ “does not require you to be an expert in statistics in order to use it, which is most critical.”

## Results & Benefits

The ROI was extremely fast. For Europe, the implementation of S099+ has already reduced stocks by \$3.4 million while maintaining the same level of service. RS also achieved improved forecast accuracy.

Key components of the success included physical redistribution of stock around the European network of 11 warehouses and changing the stocking profiles.

Next steps include releasing the SI&OP process in the United States, which is currently in implementing SAP and S099+, then introducing in Asia. In addition further improvements to the SI&OP “what if” process are envisioned.

## Next Steps

To see short excerpts from an interview with Andrew Lewis of RS Components:

1. RS Components in One Minute: Let Your People do Business Not Statistics  
<http://www.youtube.com/watch?v=OEQEG01apOw>
2. RS Components in One Minute: Show Me The Money  
<http://www.youtube.com/watch?v=X1JiNEE6I3Q>
3. RS Components in One Minute: Only Who Dares Wins  
[http://www.youtube.com/watch?v=Jp71jOmN\\_\\_g](http://www.youtube.com/watch?v=Jp71jOmN__g)

## About ToolsGroup

ToolsGroup is an innovation partner for companies who want to achieve highly accurate forecasts, outstanding customer-service levels and less global inventory. An expert in “Powerfully Simple” supply chain planning, we offer software that analyzes demand history across multiple dimensions so you can achieve the most reliable forecast and inventory targets for mastering demand volatility and delivering service level excellence.

Our innovative and advanced technologies enable you to improve and automate your planning processes. Our solutions span key supply chain planning areas such as Demand Planning, Demand Sensing, Promotion Forecasting and Inventory Optimization.

We have more than 250 customers worldwide and one of the highest customer retention rates in our industry. Our experience includes manufacturers, wholesale distributors and retailers in a wide range of demand and inventory driven industries.

Please visit our website at [www.toolsgroup.com](http://www.toolsgroup.com) and click on “About Us” for a list of our offices throughout the world.

