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The Right Tools

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Among craftsmen, there's a saying: You're only as good as your tools. When it comes to forecasting, it couldn't be more true.

While key information from customers and salespeople can provide valuable input to the forecasting process, such data do have limitations. Forecasts produced by the sales force and even by customers may lead to over or under estimating product demand, and may also leave many items unforecasted. The sales force tends to report only the largest orders and often predicts only the fastest-moving items. The result is that many companies have no comprehensive way to estimate future demand patterns and thus, properly understand their total inventory requirements.

The importance of combining sales force and customer inputs with accurate statistical forecasts based on demand history is critical. Statistical forecasting software systems play an important role in arriving at realistic and accurate demand forecasts. These systems use demand history, which is an objective and normally unbiased resource, comprehensively analyze it, and then automatically produce a statistically-based system forecast. Some forecasting software packages also enable the uncovering of trends and seasonal patterns.

While statistical forecasts based on demand history are an objective way to compensate for the limitations of subjective sales forecasts, even a statistical forecast often cannot do the job by itself. Qualitative, human input can add value to the process, and many automatic forecasting software systems permit manual adjustments, using information not available in the demand history, to override the system forecast.

Let's look at a consumer goods packaging company that successfully used statistical forecasting tools and a better collaboration process to both centralize its demand planning and use input from the field to build consensus.

This packaging company used to depend exclusively on sales force-generated forecasts for its demand and production planning. The company experienced several problems with this method: the sales force was spending too much time doing the forecast, the results demand planners received were often inaccurate, and planners weren't getting the right kind of information to help them deploy production assets. To solve this problem, the company centralized the forecasting process by installing a forecasting software system and automatically generating statistical forecasts based on demand history. It now sends the forecast results to a secure corporate Web site where salespeople in the field can review them. The field then sends any new information to

the planners who adjust the statistical forecast. According to the company, this multistep approach results in a much smoother and more accurate forecasting process.

Now imagine this same company improving its demand planning even more by extending its Web review capabilities with a truly interactive, Web-based collaborative forecasting technology. In this scenario, statistical forecast results are generated by the forecasting software system, which is directly integrated with the organization's supply chain management (SCM) or enterprise resources planning (ERP) system. Forecast results are stored in the planning system's host database where they are immediately available to collaboration software running on a corporate Web server. These results can be published to the field via the Web, where key individuals both inside the organization and at customer sites can review, comment, and even manually adjust the results—all in real time. Each individual's forecast adjustments are saved as a special forecasting session, with all changes noted, and this session is saved directly back to the planning system. The planners can then access the special forecasting sessions, evaluate everyone's input, and create a master forecast based on consensus.

Without the right tools, the benefits of collaboration described in the examples above would not be possible. With the right tools, however, statistical forecasts can be quickly generated and then enhanced using inputs obtained from a Web-based review by management, salespeople, and customers. This type of process will greatly improve forecast accuracy, as well as enable organizations to respond to changing market conditions more effectively.

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Note: The above article appeared as a sidebar to the feature article "One Total Forecast" by Arne Brander in the May 2003 issue of *APICS—The Performance Advantage* magazine.

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