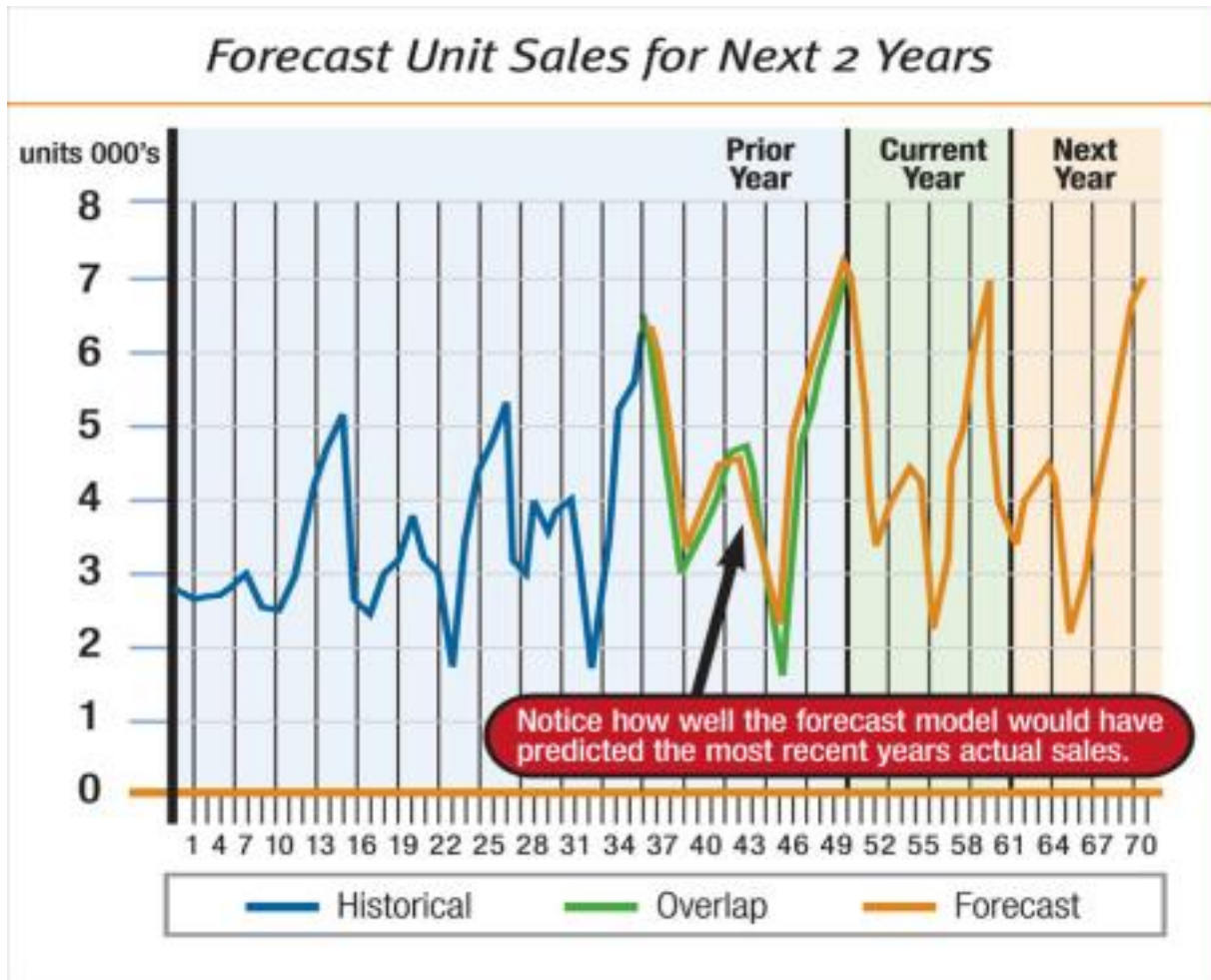


Forecasting With Data

Having data at hand that tracks the historical performance of the subject of your forecast is the envy of marketers everywhere. There's nothing quite like the confidence that comes from projecting 10 past years of sales data into the future, knowing that your only adjustments are for anticipated market and competitive conditions. With most of your causal leading indicators (i.e., housing starts, interest rates, consumer confidence, wheat futures prices, etc.) already defined, you are free to focus on the development of contingency scenarios since you don't have to worry about the basics of who will buy this product and how much they will pay for it.



The type of forecast you are making and the number and nature of the causal factors will help determine which of the many statistical techniques are most appropriate to your forecasting challenge. You don't need to know the merits of regression, exponential smoothing, Box-Jenkins, or other statistical methods. What you do need is a Ph.D. consultant or university professor to test a broad range of methods against your historical data to determine which methods are most accurate and/or most practical for your forecasting needs. Here, too, you have an advantage in that you can use the data from years 1 through 9 to feed each model and see which would have most accurately predicted year 10.

Once you have selected the appropriate statistical methodology for your forecast, you can choose from numerous inexpensive PC-based forecasting tools that can crunch the data fast, speeding up your forecasting process. (See the [Forecasting Software Survey](#).) The benefit of carefully selecting and then sticking with an automated software tool is that you begin to build consistent forecasting processes and measurement benchmarks. (It also doesn't hurt to have one in place when the CEO asks you to have a revised forecast of unit sales by country under three pricing scenarios on his desk that afternoon.)

You don't have to be a rocket scientist to select and use a tool. Today's forecasting tools are built to be used by decision-makers, not quants. For the most part, they have friendly interfaces and drag-and-drop actions to run the program. There are some 40-plus desktop forecasting tools on the market that range from simple Excel plug-in modules to sophisticated software packages, priced from \$50 to \$5,000-plus. But don't expect a "plug-and-play" experience. These tools all require some degree of a learning curve and familiarity with statistics. If you're just starting out, you might want to stick with the basic spreadsheet approach.

Spreadsheets vs. Forecasting Packages

According to Sam Savage, Consulting Professor at Stanford University and author of *Decision Making with Insight*, there are pros and cons to using spreadsheets for serious forecasting. Spreadsheet applications (like Excel) are found on more than 40 million PCs worldwide and are very familiar to most business executives. Excel plug-ins are also cheap (mostly under \$200) and tend to be easy to use.

However, spreadsheet "documentality" can be difficult because all the formulas are hidden. The cell comments and auditing tools can mitigate this problem, but errors often slip through anyway. Also, scalability can be a problem as the complexity of the forecast demands grow over time. This is awkward at best, and a show-stopper at worst.

In general the challenge with spreadsheets for forecasting is that they are tough to maintain and adapt. And because they are mostly run by a single-user, spreadsheets inhibit the knowledge-sharing process. But you have to give them serious consideration as a tool that most people in the office already have and are familiar with, thereby avoiding both the cost and some of the learning curve.

Also read [Forecasting Without Data](#).

For additional information and analysis of forecasting applications, see:

- [The Forecasting Report](#) (comparative survey of commercial forecasting systems)
- [Spreadsheet Add-Ins for OR/MS](#)
- [How to Choose a Forecasting Package](#)

