

1. Causal modeling is likely to be the best approach, because factors other than time—such as economic conditions, demand levels, political unrest, etc.—can be used to forecast fuel prices.
2. Time series forecasting techniques are not terribly well-suited to developing forecasts for *multiple* periods into the future because they have built-in mechanisms to incorporate past demand for future forecasts. Mathematically, to make time series models work past one period, one would have to use the forecast in place of actual demand numbers. As a result, the forecast would not change, or would go up or down by the trend estimate.
3. The advantage of having computer-based forecasting packages lies primarily in the fact that they can quickly develop and evaluate forecasts for thousands of products. These packages can also use tracking criteria to flag a poor forecast model and automatically start a search for a new forecasting model. However, using a computer-based forecast model can be risky because the computer only takes into account numbers and misses things that people can see such as whether something is quickly going out of style or whether a new alternative has been created and is unaccounted for in previous demand.
4. Linear regression to develop a time series forecast is different from a causal because the independent variable, or x , changes between the two forecasting types. In a time series, the independent variable is always time. For causal models, the linear regression independent variable is something that causes change *other* than time.
5. Forecasting is very important for firms because they depend on forecasts as an input to many planning activities. But firms also need to address the *organizational issues* surrounding forecasting—for example, how will we share data and who will be responsible for generating the forecasts? This is where approaches like CPFR come into play. CPFR focuses on collaboration, co-planning, and data sharing across supply chain partners.