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There are more than 50 million smart meters deployed across the United States, and that number continues to grow. Consumption data from these meters, in addition to billing data, past program participation and demographic information, illustrate the vast amount of energy information available to utilities. Energy providers now face the daunting task of making sense of this data.   Traditionally, there have been two main approaches to predictive analytics, which can be used to analyze multiple data inputs to predict energy consumption: statistical-based data mining and predictive modeling. Statistical-based data mining relies on mining enormous amounts of data to discover interesting patterns or correlations among the various variables involved. Once a correlation is identified, this approach aims to predict the dependent variable by changing the independent variable. An example of this could be in studying consumer food shopping habits. For instance, discovering a correlation that consumers who purchase bread, also tend to buy bananas.   The second popular approach is predictive modeling. This approach uses scientific principals and laws to model a process. The variables used in this approach have physical interpretations, which means that variables like temperature or size or weight can be changed to determine a number of different outcomes, something that has been used to great effect in financial and weather modeling.   But which is best suited for a utility and their customers' unique needs? This session will examine the pros and cons of employing a statistical data mining approach versus predictive analytics modeling when analyzing utility customer data.