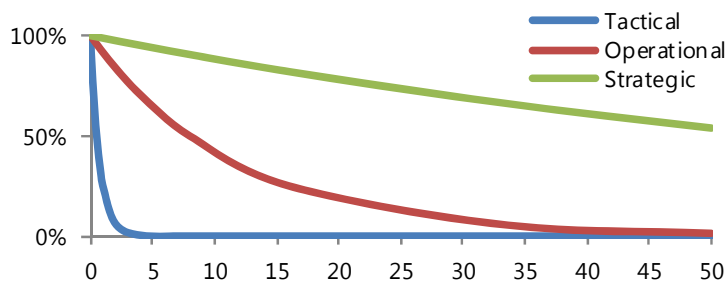


targeted customer demand so they can reclaim their research and development costs before lower-cost competitors can enter.

## TYPICAL HALF-LIFE MODELS

Based on its analysis of 47 companies and their decision making tempos, Nucleus has identified some general assumptions companies can use to evaluate the potential half-life of data sets available to them so they can prioritize data warehousing and analytics investments to maximize value of data with a short half life for tactical decision making while continuing to capture data in a meaningful way for future forecasting and strategic planning.

### THE HALF LIFE OF DATA



### TACTICAL DECISION MAKERS

In its analysis of tactical decision makers, Nucleus found that the average half life of data is 30 minutes or less. In actuality, the half life of tactical decision makers had a high standard deviation, with some companies self-reporting a half life of as little as six seconds. On average, only 30 percent of remaining data has value after that point for predictive analytics and future planning.

### OPERATIONAL DECISION MAKERS

For operational decision makers, Nucleus found the half life of data averaged 8 hours, with a range of one hour to 48 hours. On average, 30 to 70 percent of remaining data has value after that point for predictive analytics and future planning.

### STRATEGIC DECISION MAKERS

Companies that Nucleus identified as strategic in tempo made more measured decisions that tended to have longer time horizons. For these companies, the value of data tapered off at much slower rate, showing an average half life of 56 hours. On average, Nucleus