

## Paper and Pencil Principle

We interact with charts day-in and day-out as we read the news, attend meetings, review sales numbers, forecast projections, and set targets. However, we rarely stop to think about what makes these sometimes-drool-worthy pieces of information so pervasive in media and business. This white paper takes you on a journey to discover the underlying principles behind data visualization.

What's in this white paper?

**Two Goals in Data Visualization** Every visualization has a goal. Find out what are the two most common goals for visualizations, and next time you plot a chart, start with the right goal in mind.

**Eyesight and Memory Working In Parallel** Massively Parallel Processing (MPP) is a term commonly used in Big Data. Learn how our eyesight and memory uses the same mechanism to process visual information.

**Preattentive Attributes Used by Our Working Memory** No discussion of visualization would be complete without mentioning its basic building blocks - preattentive attributes. Find out what's it about a visual that catches our attention immediately.

**Forming Analytical Patterns Out of Preattentive Attributes** Our vision is inherently pattern seeking. Get a comprehensive list of the patterns we identify when analyzing a visual.

**Using the Gestalt Principles to Bring Out Patterns in Visualizations** Ever wanted to emphasize certain aspects of a visual? The Gestalt Principles can bring out your point of view with subtlety or boldness.

**An Example from Recorded Future** Finally, apply the various principles of data visualization discussed in this white paper to a real-world example from Recorded Future.