

All about thinking Analytically

Analytical thinking

- Identifying and defining a problem and then solving it by using data in an organized, step-by-step manner.

5 Key Aspects to Analytical Thinking

1. Visualization
2. Strategy
3. Problem-Orientation
4. Correlation
5. Big-Picture and Detail-Oriented Thinking

Visualization

- The Graphical Representation of Information
- Graphs
- Charts
- Maps
- Other Design Elements to Represent Data

Strategy

- Strategizing helps analysts see what they want to achieve with the data. Strategy also helps improve the quality and usefulness of the data we collect.

Problem-Orientation

- Data analysts use a problem-oriented approach in order to **identify, Describe, and Solve Problems**
- The Goal is to keep the problem at the top of the mind throughout the entire project.

Correlation

- A correlation is a relationship between two or more pieces of data.
- Beware, **Correlation does NOT equal causation**

Big-Picture / Detail-Oriented Thinking

- "Big-Picture"
 - Being able to step back and look at the whole picture.
- "Detail-Oriented"
 - The ability to focus on a small part of an overall picture.