The importance of context

Context in data analytics is the condition and circumstances that surround and give meaning to the data. Context is important in data analytics because it helps make disorganized data accessible and understood. The fact is, data has little value if it is not paired with context.



Understanding the context behind the data can help us make it more meaningful at every stage of the data analysis process. For example, you might be able to make a few guesses about what you're looking at in the following table, but you couldn't be certain without more context.

2010	28000
2005	18000
2000	23000
1995	10000

On the other hand, if the first column was labeled to represent the years when a survey was conducted, and the second column showed the number of people who responded to that survey, then the table would start to make a lot more sense. Take this a step further, and you might notice that the survey is conducted every 5 years. This added context helps you understand why there are five-year gaps in the table.

Years (Collected every 5 years)	Respondents
2010	28000
2005	18000
2000	23000
1995	10000

Context can turn raw data into meaningful information. It is very important for data analysts to contextualize their data. This means giving the data perspective by defining it. To do this, you need to identify:

• Who: The person or organization that created, collected, and/or funded the data collection

• What: The things in the world that data could have an impact on

• Where: The origin of the data

• When: The time when the data was created or collected

• Why: The motivation behind the creation or collection

• How: The method used to create or collect it



Understanding and including the context is important during each step of your analysis process, so it is a good idea to get comfortable with it early in your career. For example, when you collect data, you'll also want to ask questions about the context to make sure that you understand the business and business process. During organization, the context is important for your naming conventions, how you choose to show relationships between variables, and what you choose to keep or leave out. And finally, when you present, it is important to include contextual information so that your stakeholders understand your analysis.