Data and gut instinct

Detectives and data analysts have a lot in common. Both depend on facts and clues to make decisions. Both collect and look at the evidence. Both talk to people who know part of the story. And both might even follow some footprints to see where they lead. Whether you're a detective or a data analyst, your job is all about following steps to collect and understand facts.

Analysts use data-driven decision-making and follow a step-by-step process. You have learned that there are six steps to this process:

1. **Ask** questions and define the problem.
2. **Prepare** data by collecting and storing the information.
3. **Process** data by cleaning and checking the information.
4. **Analyze** data to find patterns, relationships, and trends.
5. **Share** data with your audience.
6. **Act** on the data and use the analysis results.

But there are other factors that influence the decision-making process. You may have read mysteries where the detective used their gut instinct, and followed a hunch that helped them solve the case. **Gut instinct** is an intuitive understanding of something with little or no explanation. This isn't always something conscious; we often pick up on signals without even realizing. You just have a "feeling" it's right.

Why gut instinct can be a problem

At the heart of data-driven decision making is data. Therefore, it's essential that data analysts focus on the data to ensure they make informed decisions. If you ignore data by preferring to make decisions based on your own experience, your decisions may be biased. But even worse, decisions based on gut instinct without any data to back them up can cause mistakes.

Consider an example of a real estate developer bidding to redevelop a part of a city's central district. They were well-known for preservation of historical buildings. Banking on their reputation, the agency's planners followed gut instinct and included the preservation of several buildings to gain support and win approval for the project. However, private donations fell short and a partnership failed to materialize and save the day. The buildings eventually had to be torn down after much delay and an expensive dispute with the city.

The more you understand the data related to a project, the easier it will be to figure out what is required. These efforts will also help you identify errors and gaps in your data so you can communicate your findings more effectively. Sometimes past experience helps you make a connection that no one else would notice. For example, a detective might be able to crack open a case because they remember an old case just like the one they're solving today. It's not just gut instinct.

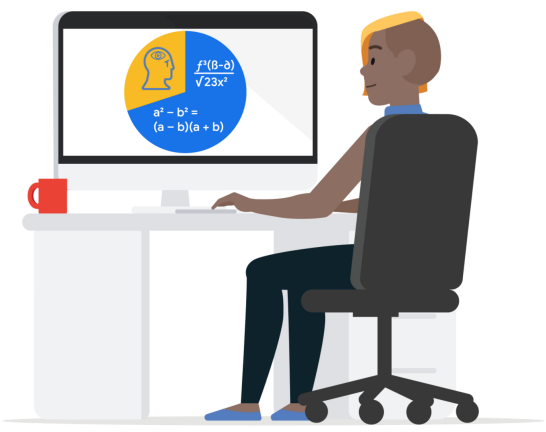
Data + business knowledge = mystery solved

Blending data with business knowledge, plus maybe a touch of gut instinct, will be a common part of your process as a junior data analyst. The key is figuring out the exact mix for each particular project. A lot of times, it will depend on the goals of your analysis. That is why analysts often ask, "How do I define success for this project?"

In addition, try asking yourself these questions about a project to help find the perfect balance:

- What kind of results are needed?
- Who will be informed?
- Am I answering the question being asked?
- How quickly does a decision need to be made?

For instance, if you are working on a rush project, you might need to rely on your own knowledge and experience more than usual. There just isn't enough time to thoroughly analyze all of the available data. But if you get a project that involves plenty of time and resources, then the best strategy is to be more data-driven. It's up to you, the data analyst, to make the best possible choice. You will probably blend data and knowledge a million different ways over the course of your data analytics career. And the more you practice, the better you will get at finding that perfect blend.



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