



TriMetrix®HD Analysis of Data

Analysis of Data

Analyzing and challenging details, data and facts prior to decision making is viewed as an important part of decision making. Information is maintained accurately for repeated examination as required.

Why is this behavior important?

According to the Merriam-Webster Dictionary, data is “factual information (as measurements or statistics) used as a basis for reasoning, discussion or calculation.” In other words, data is interpreted, analyzed and used to make some sort of conclusion.

Data alone does not tell you the answer. You have to interpret or analyze the data you have in order to get usable information. The difference between data and information is that data consists of raw facts while information is obtained by analyzing and understanding patterns in the data. Data may be numbers, reports or results from previous experiences.

In the world of mathematics, finance and computer science, data analysis involves numbers and statistics. In some jobs in the corporate world, the same types of data analysis are required, which is called quantitative data analysis. However, in most cases in the corporate world, data analysis simply involves your ability to gather data about a particular topic and determine patterns and information from that data. Once you have interpreted the pattern to the data, you need to be able to make decisions based on what you learned. This type of data analysis is qualitative data analysis.

To be proficient at qualitative data analysis, you must know where to get enough relevant data on processes or projects and be able to keep that data organized. Then, you need to learn how to make appropriate analysis of the data, resulting in useable, relevant information. Finally, you must be able to make effective decisions based on what you learned in the process of analyzing the data you collected.

It is important to perform fairly complex work independently. You need to take initiative to seek out data, properly investigate and analyze it, and then apply it to current situations. You could be judged not only on the results you obtain, but also on the methods that you use to obtain them.

What behavioral characteristics are associated with Analysis of Data?

Someone who has characteristics associated with Analysis of Data:

- Knows where and how to access relevant information.
- Is able to forecast and anticipate critical opportunities.
- Has the ability to make competent decisions based on available data.
- Can apply lessons learned to new situations.
- Is able to intelligently extrapolate information and make effective assumptions based on limited data

- Develop networks of people inside and outside of your organization. These people will be resources for you as you gather data.
- Document your sources and ensure they are reputable.
- Compare data and analysis of situations you run across with your peers. Discuss it with your managers where appropriate.
- Pay attention to history. Learn from past experiences and apply what you have learned to new events.
- Break down complex data into simpler parts. See if you can build your analysis from the ground up!
- Try to validate hypotheses you develop. In other words, test your assumptions and apply your ideas to one customer or one situation you encounter. If it works, try it on five. If your assumptions have flaws see what improvements you can make.
- Develop tracking systems for projects you are involved in. Keep track of performance data and results, expenses, or any other relevant data.
- Learn what information is in corporate libraries.
- Learn how to use computer software that helps you record, track and analyze data.
- Keep up with industry trends and learn from the experiences and data that others report.
- Be careful to consider alternative courses of action and the potential results when you are analyzing new problems or situations.
- Practice your problem-solving skills. Volunteer to participate in the design of a new process or involve yourself in resolving a difficult problem.
- Determine cause-and-effect relationships. What caused the problems? What effects can you expect from specific actions?
- Don't make decisions hastily. Make sure you gather enough data to make a full analysis because the decisions you make will be much more informed and supported.
- Even if you are working with subjective data, such as opinions, interviews or non-scientific observation, try to evaluate it against objective criteria, such as available resources, known past experiences, alignment with corporate goals, etc.
- Perform a risk/benefit ratio analysis. What are the risks associated with making a certain decision? What are the benefits? How do they measure up?
- Don't just base decisions on numerical or written data. Be sure you understand and consider how your decisions will affect people.
- Share what you learn with others. Let other people have access to data that you have gathered or collected.

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Activities

Activity 1: Analysis of the Past

Think of a recent situation in which you were required to analyze data for your job.

What was the situation? _____

What did you need to learn about or explore? _____

What did you need to learn about or explore? _____

What do you think you could have done differently? _____

Who could have helped you find better information? _____

How would more or better information have changed the decisions you made or plans you developed? _____

Activity 2: Difficult Decisions

Analyze a difficult decision you need to make in your professional life or your personal life. See if you can gather and analyze data about the decision in order to make it an easier decision to make. Think about the following questions to get you started on your deliberations:

What decision is required? _____

Is the decision going to be based on emotions or facts and figures? _____

What kind of information do you need in order to make the decision? _____

What would make you comfortable with the decision you are going to make? _____

Where can you get this information? _____

Activity 3: Sharing Information

Is there someone in your office who always seems to make the right decisions? There may be more than one person you know who makes good decisions based on accurate data analysis. Make appointments to interview at least two people you know who fit that description. Talk to them in detail about how they collect and analyze data and how the data analysis contributes to effective decision-making.

Activity 4: Resources

One of the most important aspects of data analysis is obtaining good data. This means your sources of data must be reputable, and the data you gather should be accurate and useable. List at least five resources within your company and industry and work toward cultivating relationships and learning how to use the resources better.

Industry associations or trade groups: _____

Corporate libraries or collections: _____

Co-workers: _____

Books or journals: _____

Other resources: _____

