Writing a Good Data Analysis Report: 7 Steps

As a data analyst, you feel most comfortable when you're alone with all the numbers and data. You're able to analyze them with confidence and reach the results you were asked to find. But, this is not the end of the road for you. You still need to write a data analysis report explaining your findings to the laymen - your clients or coworkers.

That means you need to think about your target audience, that is the people who'll be reading your report.

They don't have nearly as much knowledge about data analysis as you do. So, your report needs to be straightforward and informative. This will help you learn how to do it. Let's take a look at some practical tips you can apply to your data analysis report writing and the benefits of doing so.

And remember, some of these things will be critical in some reports, and some of these items will be too much detail for simpler analysis. You'll learn where the right level of detail is only by doing plenty of these types of reports. You can always boil it down, so be thoughtful as you draft your sections.

DATA ANALYSIS REPORT WRITING: 7 STEPS

The process of writing a data analysis report is far from simple, but you can master it quickly, with the right guidance.

This is why we've prepared a step-by-step guide that will cover everything you need to know about this process, as simply as possible. Let's get to it.

1 - Consider Your Audience

You are writing your report for a certain target audience, and you need to keep them in mind while writing. Depending on their level of expertise, you'll need to adjust your report and ensure it speaks to them. So, before you go any further, ask yourself:

Who will be reading this report? How well do they understand the subject?

Let's say you're explaining the methodology you used to reach your

conclusions and find the data in question. If the reader isn't familiar with these tools and software, you'll have to simplify it for them and provide additional explanations.

So, you won't be writing the same type of report for a coworker who's been on your team for years or a client who's seeing data analysis for the first time. Based on this determining factor, you'll think about:

- the language and vocabulary you're using
- abbreviations and level of technicality
- the depth you'll go into to explain something
- the type of visuals you'll add

Your readers' expertise dictates the tone of your report and you need to consider it before writing even a single word.

Draft Out the Sections

The next thing you need to do is create a draft of your data analysis report. This is just a skeleton of what your report will be once you finish. But, you need a starting point.

So, think about the sections you'll include and what each section is going to cover. Typically, your report should be divided into the following sections:

- Introduction
- Body (Data, Methods, Analysis, Results)
- Conclusion

For each section, write down several short bullet points regarding the content to cover. Below, we'll discuss each section more elaborately.

2 - Develop The Body

The body of your report is the most important section. You need to organize it into subsections and present all the information your readers will be interested in.

We suggest the following subsections.

Data

Explain what data you used to conduct your analysis. Be specific and explain how you gathered the data, what your sample was, what tools and resources you've used, and how you've organized your data. This will give the reader a deeper understanding of your data sample and make your report more solid.

Also, explain why you choose the specific data for your sample. For instance, you may say "The sample only includes data of the customers acquired during 2021, in the peak of the pandemic."

Methods

Next, you need to explain what methods you've used to analyze the data. This simply means you need to explain why and how you choose specific methods. You also need to explain why these methods are the best fit for the goals you've set and the results you're trying to reach.

Back up your methodology section with background information on each method or tool used. Explain how these resources are typically used in data analysis.

Analysis

After you've explained the data and methods you've used, this next section brings those two together. The analysis section shows how you've analyzed the specific data using the specific methods.

This means you'll show your calculations, charts, and analyses, step by step. Add descriptions and explain each of the steps. Try making it as simple as possible so that even the most inexperienced of your readers understand every word.

Results

This final section of the body can be considered the most important section of your report. Most of your clients will skim the rest of the report to reach this section.

Why?

Because it'll answer the questions you've all raised. It shares the results that were reached and gives the reader new findings, facts, and evidence.

So, explain and describe the results using numbers. Then, add a written description of what each of the numbers stands for and what it means for the entire analysis. Summarize your results and finalize the report on a strong note.

4 - Write the Introduction

Yes, it may seem strange to write the introduction section at the end, but it's the smartest way to do it. This section briefly explains what the report will cover. That's why you should write it after you've finished writing the Body.

In your introduction, explain:

- the question you've raised and answered with the analysis
- context of the analysis and background information
- short outline of the report

Simply put, you're telling your audience what to expect.

5 - Add a Short Conclusion

Finally, the last section of your paper is a brief conclusion. It only repeats what you described in the Body, but only points out the most important details.

It should be less than a page long and use straightforward language to deliver the most important findings. It should also include a paragraph about the implications and importance of those findings for the client, customer, business, or company that hired you.

6 - Include Data Visualization Elements

You have all the data and numbers in your mind and find it easy to understand what the data is saying. But, to a layman or someone less experienced than yourself, it can be quite a puzzle. All the information that your data analysis has found can create a mess in the head of your reader.

So, you should simplify it by using data visualization elements.

Firstly, let's define what are the most common and useful data visualization elements you can use in your report:

- graphs
- charts
- images
- tables
- maps

There are subcategories to each of the elements and you should explore them all to decide what will do the best job for your specific case. For instance, you'll find different types of charts including, pie charts, bar charts, area charts, or spider charts.

For each data visualization element, add a brief description to tell the readers what information it contains. You can also add a title to each element and create a table of contents for visual elements only.

7 - Proofread & Edit Before Submission

All the hard work you've invested in writing a good data analysis report might go to waste if you don't edit and proofread. Proofreading and editing will help you eliminate potential mistakes, but also take another objective look at your report.

First, do the editing part. It includes:

- reading the whole report objectively, like you're seeing it for the first time
- leaving an open mind for changes

- adding or removing information
- rearranging sections
- finding better words to say something

You should repeat the editing phase a couple of times until you're completely happy with the result. Once you're certain the content is all tidied up, you can move on to the proofreading stage. It includes:

- finding and removing grammar and spelling mistakes
- rethinking vocabulary choices
- improving clarity
- improving readability

Proofread yourself or get some help with it, and make sure your report is well-organized and completely error-free. It will make an impact that way, and people will not be distracted by errors in your work.

BENEFITS OF WRITING WELL-STRUCTURED DATA ANALYSIS REPORTS

Yes, writing a good data analysis report is a lot of hard work. But, if you understand the benefits of writing it, you'll be more motivated and willing to invest the time and effort. After knowing how it can help you in different segments of your professional journey, you'll be more willing to learn how to do it.

Below are the main benefits a data analysis report brings to the table.

Improved Collaboration

When you're writing a data analysis report, you need to be aware more than one end user is going to use it. Whether it's your employer, customer, or coworker - you need to make sure they're all on the same page. And when you write a data analysis report that is easy to understand and learn from, you're creating a bridge between all these people.

How?

Simply, all of them are given accurate data they can rely on and you're thus removing the potential misunderstandings that can happen in communication. This improves the overall collaboration level and makes everyone more open and helpful.

Increased Efficiency

People who are reading your data analysis report need the information it contains for some reason. They might use it to do their part of the job, to make decisions, or report further to someone else. Either way, the better your report, the more efficient it'll be. And, if you rely on those people as well, you'll benefit from this increased productivity as well.

KPIs

Data tells a story about a business, project, or venture. It's able to show how well you've performed, what turned out to be a great move, and what needs to be reimagined. This means that a data analysis report provides valuable insight and measurable KPIs (key performance indicators) that you're able to use to grow and develop.

Clear Communication

Information is key regardless of the industry you're in or the type of business you're doing. Data analysis finds that information and proves its accuracy and importance. But, if those findings and the information itself aren't communicated clearly, it's like you haven't even found them.

This is why a data analysis report is crucial. It will present the information less technically and bring it closer to the readers.

FINAL THOUGHTS

As you can see, it takes some skill and a bit more practice to write a good data analysis report. But, all the effort you invest in writing it will be worth it once the results kick in. You'll improve the communication between you and your clients, employers, or coworkers. People will be able to

understand, rely on, and use the analysis you've conducted.

So, don't be afraid and start writing your first data analysis report. Just follow the 7 steps we've listed and use your tools for data analysis. You'll be surprised when you see the result of your hard work.