Reading Assignment – Be Data Literate: Ch 5 and Ch 6

**Reading Assignment – Be Data Literate: Ch 5 and Ch 6**

|  |  |
| --- | --- |
| Name: Paolo Matthew Tolentino | Date: 07/03/2023 |
| Major: BS Computer Science |  |

**Objective:** Evaluate student understanding and critical thinking skills by answering guide questions based on a book chapter.

**Instructions:** Read the assigned book chapter thoroughly and answer the following guide questions. Be sure to provide specific examples from the text to support your answers.

**Title:** Be Data Literate by Jordan Morrow

**Chapter/s:** Chapter 5 and 6

**Guide Questions:**

1. **Briefly summarize the main ideas presented in the chapter. What are the key points the author is trying to convey?**

The main ideas presented in chapters 5 and 6 of Be Data Literate are the importance of understanding the quality of data before you use it, and the basic concepts of data analysis. The author argues that data dirt, or any kind of error or inaccuracy in data, can have a significant impact on the results of your analysis. He provides several tips for identifying and cleaning data dirt, and discusses the basic concepts of data types, measures of central tendency, measures of variation, correlation, regression, and hypothesis testing.

1. **Describe the author's writing style. Is it clear, engaging, and easy to understand? Provide examples to support your opinion.**

The author's writing style is clear, engaging, and easy to understand. He uses a variety of techniques to keep the reader's attention, such as using real-world examples, providing clear definitions of terms, and using humor. For example, in chapter 5, he uses the example of a company that was using data to make decisions about who to hire, but the data was inaccurate, which led to the company making bad decisions. This example helps the reader to understand the importance of data quality.

1. **Identify any new terms or concepts introduced in the chapter. Define them and explain their significance to the chapter's main ideas.**

Some of the new terms or concepts introduced in chapters 5 and 6 include:

* **Data dirt**: Any kind of error or inaccuracy in data.
* **Data types:** There are two main types of data: quantitative and qualitative. Quantitative data is numerical data, while qualitative data is non-numerical data.

These terms and concepts are all significant to the chapter's main ideas because they are essential for understanding how to identify and clean data dirt, and how to analyze data effectively.

1. **Discuss the evidence or examples provided by the author to support their arguments. Are they convincing and relevant? Explain your reasoning.**

The author provides a variety of evidence and examples to support his arguments. Some of the evidence includes:

* Real-world examples of how data dirt has led to bad decisions.
* Statistical data on the prevalence of data dirt.

I found the evidence and examples to be convincing and relevant. They helped me to understand the importance of data quality and the concepts of data analysis.

1. **Were there any areas in the chapter that you found confusing or difficult to understand? If so, describe those areas and explain why they were challenging.**

There were a few areas in the chapter that I found confusing or difficult to understand. One area was the discussion of correlation. I found it difficult to understand how to interpret the results of a correlation coefficient. Another area was the discussion of regression. I found it difficult to understand how to use regression to predict the value of one variable based on the value of another variable.

1. **Identify any potential biases or assumptions the author may have made in presenting their ideas. How might these biases or assumptions affect the credibility of the chapter?**

The author may have made some potential biases or assumptions in presenting their ideas. For example, the author seems to assume that the reader has some basic understanding of statistics. This assumption could make the chapter less accessible to some readers. Additionally, the author's focus on data analysis could lead some readers to believe that data is the only important factor in decision-making. However, the author does acknowledge that other factors, such as human judgment, are also important.

1. **Compare the ideas presented in this chapter to those in previous chapters or other materials you have read on the topic. Are there any similarities or differences? Explain your observations.**

The ideas presented in chapters 5 and 6 are similar to those presented in previous chapters. For example, the importance of data quality is emphasized in all of the chapters.

1. **What questions or concerns do you have after reading this chapter? Are there any topics you would like to explore further?**

After reading chapters 5 and 6, I have a few questions and concerns:

* What are some of the most common types of data dirt?
* How can I use statistical tests to identify data dirt?

I would also like to explore the following topics further:

* The ethical implications of data analysis

1. **How do the ideas presented in the chapter relate to your own experiences, beliefs, or opinions? Provide examples to illustrate the connections.**

The ideas presented in chapters 5 and 6 relate to my own experiences, beliefs, and opinions in several ways. For example, I have always been interested in statistics and data analysis. I have also seen how data can be used to make decisions, both good and bad.

1. **Summarize your overall impression of the chapter. Do you agree or disagree with the author's main arguments? Why or why not?**

Overall, I found chapters 5 and 6 to be very informative and helpful. The author does a good job of explaining the basics of data quality and data analysis concisely. I also agree with the author's main arguments. Data literacy is becoming increasingly important in today's world, and everyone should have a basic understanding of how to use data effectively.

Prepared by: Bob Mathew D. Sunga