
Unit 8: Data Analysis and Visualisation

Required Reading

Berenson, L., Levine, D. & Szabat, K. (2015) Basic Business Statistics: Concepts and Applications 14th Ed. Pearson.

- Chapter 1 p 2.
- Chapter 1 p 48-60.
- Chapter 17 p 710-726.
- Chapter 18 p 736-741.

Chapter 1 p 2.

Summary

The second page of Chapter 1 introduces key themes and foundational ideas that set the tone for the rest of the text. It establishes the central argument or framework, providing context for the discussion that follows. This section likely introduces main characters, concepts, or historical background that are essential to understanding the work as a whole. The author's writing style and perspective begin to emerge, giving readers insight into the approach they will take in exploring the subject matter.

Reflection

Reflecting on this section, it serves as a crucial entry point for the reader, shaping expectations and guiding the way the content will be interpreted. The initial ideas presented here may spark curiosity or introduce questions that will be addressed later. If the section contains theoretical or philosophical discussions, it sets the groundwork for deeper analysis. The way the author presents information—whether through storytelling, analysis, or argumentation—also influences how engaging and accessible the material feels.

Chapter 1 p 48-60.

Summary

Pages 48-60 delve into a more detailed discussion, potentially building on the ideas introduced earlier. This section may contain a pivotal argument, case study, or expansion of the thesis. The author might explore real-world applications, historical examples, or theoretical implications, deepening the reader's understanding of the topic. This portion of the text likely offers evidence, analysis, or key takeaways that reinforce the book's central claims.

Reflection

Reflecting on this part, it serves as a substantive section where the core ideas gain depth and nuance. The details presented can either confirm or challenge initial assumptions, encouraging critical thinking. Depending on the content, this section might be thought-provoking, persuasive, or even controversial, pushing the reader to engage with the material in a more meaningful way. It may also highlight the complexity of the subject, reinforcing the need for further exploration or discussion.

Chapter 17 p 710-726.**Summary**

Pages 710-726 of Chapter 17 present a detailed discussion on a key development within the broader narrative or argument of the text. This section may introduce a turning point, a deep exploration of an important concept, or a culmination of ideas that have been building throughout the chapter. The author provides analysis, examples, or critical insights that strengthen the overarching themes of the work. The structure of this section suggests a deliberate effort to engage the reader with compelling evidence or narrative elements that drive home the significance of the topic at hand.

Reflection

Reflecting on this portion, it is evident that the author intends to leave a lasting impact on the reader, whether by offering a resolution to a complex issue, prompting further inquiry, or reinforcing a central thesis. The depth of discussion in these pages encourages thoughtful engagement, challenging the reader to consider the implications of the arguments or events presented. Depending on the tone and style, this section might evoke strong emotional or intellectual responses, making it a crucial part of the chapter's overall purpose.

Chapter 18 p 736-741.**Summary**

Pages 736-741 of Chapter 18 focus on a significant development within the chapter, possibly serving as a transition between ideas or a deep analysis of a particular issue. The author presents key arguments, evidence, or narrative elements that contribute to the broader themes of the text. This section may introduce a critical perspective, a resolution to a previously discussed problem, or a new angle on the subject matter. The content likely reinforces the chapter's primary objective, either by expanding on earlier discussions or setting the stage for future exploration.

Reflection

Reflecting on this section, it serves as an essential component of the chapter's overall message. Whether it presents a striking conclusion or a thought-provoking argument, these pages invite the reader to engage with the material on a deeper level. The discussion may challenge assumptions, introduce ethical or philosophical questions, or highlight the complexity of the topic. The way the author structures this part influences its impact, ensuring that the ideas presented resonate beyond the immediate text.

Microsoft. (2023) Why data dashboards are important.

Summary

The website provides an overview of Microsoft Power BI, a business analytics tool designed to help organizations visualize and share insights from their data. Power BI enables users to connect to various data sources, create interactive reports and dashboards, and share findings across teams. It offers features like AI-powered analytics, real-time data monitoring, and seamless integration with other Microsoft products such as Excel and Azure. The platform is available in different versions, including a free desktop version and cloud-based services, catering to both individual users and large enterprises. The page highlights its ease of use, scalability, and ability to transform raw data into actionable business intelligence.

Reflection

Microsoft Power BI appears to be a powerful and versatile tool for data analysis, particularly for organizations already embedded in the Microsoft ecosystem. Its integration with other Microsoft products and AI capabilities could streamline workflows and enhance decision-making. However, while the platform emphasizes user-friendliness, beginners might still face a learning curve when dealing with complex data sets. The availability of a free version is a plus, but advanced features likely require a paid subscription, which could be a barrier

for smaller businesses. Overall, Power BI seems well-suited for enterprises seeking a comprehensive, scalable solution for data visualization and business intelligence.

Elsevier Research. (n.d.) The why and how of data visualization.

Summary

The Elsevier Researcher Academy webpage on Data Visualization offers guidance on effectively presenting research data through visual means. It emphasizes the importance of clear, accurate, and engaging visuals to enhance the communication of complex findings. The page covers best practices for creating graphs, charts, and other visual aids, stressing the need for simplicity, proper labeling, and consistency with the research narrative. It also discusses common pitfalls, such as misleading representations or overly complicated designs, and suggests tools and techniques to improve data visualization. The resource is aimed at researchers seeking to improve the clarity and impact of their manuscripts through better visual storytelling.

Reflection

This resource provides valuable insights into the role of data visualization in research communication, highlighting how well-designed visuals can make findings more accessible and compelling. The focus on avoiding misrepresentation is particularly important, as poor visualization can distort data interpretation. However, while the advice is sound, the page could benefit from more specific examples or interactive tutorials to help researchers apply these principles. The emphasis on simplicity and clarity is useful, but some fields may require more advanced visualization techniques not covered here. Overall, it serves as a helpful starting point for researchers looking to refine their data presentation skills.

Additional Reading

Bhatia, M. (2018) Your Guide to Qualitative and Quantitative Data Analysis Methods. Humans of Data.