



Data Analysis Start

🕒 Created	@February 21, 2022 9:26 AM
📅 Date	@February 21, 2022
🔗 Property	Head First Data Analysis.pdf visualization-analysis-and-design.pdf
🔗 Link	https://www.buffalo.edu/tcie/professional-education/course-list/process-improvement.html
📌 Status	In progress
👤 Persons	

Data-Driven Decision Making (DDDM) Specialization:

⇒ The business case In Course for IoT (Internet of Things)

WHAT YOU WILL LEARN(General)⇒

- Identify gaps in data collection processes needed to drive improvements

A gap analysis

→ is a process that compares actual performance or results with what was expected or desired. The method provides a way to identify suboptimal or missing strategies, structures, capabilities, processes, practices, technologies, or skills, and then recommends steps that will help the company meet its goals.

→ As opposed to a risk assessment Because ⇒ risk assessment studies the “**Unexpected**” but gap analysis studies the “**Current state**”

- **Compare and contrast data analysis and visualization tools for generating metrics dashboards**
- **Define techniques to validate performance metrics and data integrity**

→ *Data quality dimensions are important because they enable people to understand why data is being measured.*

- **Prepare and present multiple examples of data-driven decision-making**

→ **Examples**⇒ **Ecommerce sites** typically use data to drive profits and sales. If you've ever shopped at Amazon you have probably received a product recommendation while visiting the Amazon website or through email. This is an example of a data-driven business decision.

WHAT YOU WILL LEARN(In Course One)⇒

- **Develop a plan to align operational and performance goals**
- **Devise a data collection strategy and validate data integrity**
- **Understand how to create current and future state process maps**
- **Prioritize data gaps for root cause analysis**

SKILLS YOU WILL GAIN(In Course One)⇒

- **Gap assessment**
- **Business Process Mapping**

→ *Process mapping is the first key step aimed at **identifying and documenting tasks or activities** within a business process. It details an end-to-end process, including what is being done, who is involved, as well as when and where.*

- **KPIs**
- **Data Collection**
- **Data-Driven Decision Making**

→ Data-driven decision-making (DDDM) ⇒ is defined as using facts, metrics, and data to guide **strategic business decisions** that align with your goals, objectives, and initiatives. When

organizations realize the full value of their data, that means everyone—whether you’re a business analyst, sales manager, or human resource specialist—is empowered to make better decisions with data, every day. However, this is not achieved by simply choosing the appropriate analytics technology to identify the next strategic opportunity.

Data Analyst Track Core Content - Pluralsight

Data Foundations <ul style="list-style-type: none"> • Data: Executive Briefing • Big Data: The Big Picture • Data Analytics Literacy 	Enterprise Data Management <ul style="list-style-type: none"> • Big Picture: Enterprise Data Management • Managing Data in the Cloud • Principles for Data Quality Measures 	SQL & NoSQL <ul style="list-style-type: none"> • Introduction to SQL • SQL Server: Understanding Database • NoSQL: The Big Picture • Recognize the Need for Document Databases • Introduction to Graph Databases, Cypher, and Neo4j
Data Modeling <ul style="list-style-type: none"> • Data Modeling • Enterprise Data Modeling: Getting Started • Star Schema Foundations • Dimensional Modeling on the Microsoft SQL Server Platform • Schema Modeling Patterns • Modeling Streaming Data for Processing 	Data Analysis with Python <ul style="list-style-type: none"> • Building Your First Python Analytics Solution • Python for Data Analysts 	Data Analysis with R <ul style="list-style-type: none"> • Exploring Your First Data Set with R • Exploring Data Visually with R
Communication with Data <ul style="list-style-type: none"> • Communicating Data and Analysis Results • Communicating Data Insights 	Data Visualization <ul style="list-style-type: none"> • Data Visualization Literacy • Making Data into Something You Can See • Data Storytelling: Moving Beyond Static Data Visualizations • Analyzing Data Visualization Requirements • Objectivity in Data Visualization • Data Visualization: Best Practices 	Power BI & Tableau Basics <ul style="list-style-type: none"> • Demonstrating the Business Value of Power BI • Building Your First Power BI Report • Build Your First Dashboard with Tableau • Storytelling with Tableau
	Introduction to Visualization with Python & R <ul style="list-style-type: none"> • Introduction to Data Visualization with Python • Beginning Data Visualization with R • Mastering Data Visualization with R 	