

Data Analysis Case Study - Office Supplies Orders

Data Analysis Case Study Assessment

- ✓ Assessment will be a "Data Analysis Case Study"
- ✓ Key activities under this exercise will be to:
 - Conduct Data Quality checks and EDA to report findings (examples are being covered in class)
 - Find a suitable approach to solve the problem (examples to be covered in class)
 - Feature Engineer to create new variables (examples to be covered in class)
 - Generate summaries using a combination of variables that help address the problem
 - Make final recommendations to address the Business Problem (template to be shared with learners)
 - Summarizing the entire activity in a 1-slide case study format (template to be shared with learners)
- Each learner will present their findings to a HV Faculty Panel and get assessed on various parameters such as Relevance and Authenticity of analysis, Group members' participation, quality of outputs and overall execution of presentation



Case Study - Office Supplies Orders Analysis

- ✓ An Office furniture and supplies company with a Global footprint wants to analyze its historical orders information to be able to better understand how its business has performed across different markets, customer segments and product categories
- ✓ Their nature of business is to take online order of office furniture and non/stationary items and supply to customers of different type, be it Corporate, Consumer or home-office
- ✓ It has extracted its historical orders information for a period of 4 years. This is available for every order placed by their clients for any date (in these 4 years)



- Order details Order ID & Date, Product ID, Category & Description, Quantity and \$ Sales amount, Shipping mode and Order priority
- Customer Information Name, Segment, City, State, Country, Region and Market
- Other miscellaneous information Shipping cost, % discount, \$ profit



Business Objective

- ✓ The Company's leadership team is mulling different strategies which will boost its future sales and in turn profit
- ✓ They need assistance in performing some quantitative analysis and use the generated insights as a guide to decide an appropriate strategy
- ✓ Using the available information what analysis would you perform that can help the client?

How to decide what Approach to take?

- ✓ A good starting point is to list what all strategic actions can the client take to boost its sales/ profit
- Secondly, rule out the possibilities which cannot be answered by the provided data (as the client is looking for a Quantitative Analysis and its outcomes/insights to guide any decision making)
- ✓ For the areas where any analysis could be performed, think of the
 - Right questions to be asked or Hypothesis to be made, which the data can help answer
 - Appropriate metrics/summaries to be created and looked at

Case Study: Grading Criteria

Index	Parameter	Weightage	Score (out of 10)
1	Relevance of Analysis	25%	
2	Quality of Outputs	10%	
3	Group Participation	25%	
4	Overall presentation	10%	
5	Response to Panel's questions	20%	
6	Creativity & Innovation	10%	



Thank You

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