Question

A telephone company wants predict which customers are most likely to respond to product offers in the future.

Data Description (case1.sav**):**

The data used is from the data warehouse for a telephone company. A subset of the customer base was selected at random and given 3 product offers, and their responses were recorded. Data contain information about responses to the special promotions by 5,000 of the company's customers. Three "target" fields show whether or not the customer responded to each of three offers. They could accept any of the offers or none (some customers accepted all 3 offers, some 2, some 1, and some none). The data also include a large number of fields containing customers' age, employment, income, and telephone usage statistics.

A. [10 points] Design a plan for implementing a data project for company X where you analyse:
    1. [2 points] Define goals/Value proposition. Justify why we should be doing this.
    2. [4 points] Define tasks. Fundament the choice of variables, preliminary analysis , and descriptives we need to know (preprocessing and exploration).
        - **Conceptually**, which variables do you recommend using for prediction? Explain why.
    3. [2 points] Define methods/techniques (broadly. At this stage you are not equipped to make these choice but give them some thought. They will be important latter on).
        - What do you recommend as a good model to predict subscription?
    4. [2 points] Evaluate requirements: Human and technological.
B. [10 points] Perform the tasks defined in 2 that you find important (preprocessing and exploration).

The report (per group) should be submitted before the 30th of April at 11.30 am by email to bernardo.costa@novasbe.pt. Late submissions will not be considered. Please make sure to identify the group number and all group members. The report should answer all questions and be at maximum 6 pages long (one and half spacing, 11pt font, 2.5cm margins). No appendix.