Mini-project assignment

The scope of the mini-project was outlined by dr Lorkiewicz during the lecture. This assignment file only specified points for each part, to a total of 30 points (MAX). Please prepare a report describing your reasoning for the approaches used (and selections made). I am not interested in reading what 'you' learned about DW, but what can be learned from that specific data for business needs. Additionally, be ready to answer any questions and show your work.

- **Part 1: Analysis – max 6 points**
  - Find and explain OLTP dataset – 4 points
    - One data source – points will be divided by half
    - Highly processed data – points will be divided by half (multiplicative)
    - The same data format of data – minus 1 point
    - Using any tutorial database – 0 points for entire Part 1
  - Describe analytical needs
    - 5 distinct possible questions for analytical needs – 1 point, xor
    - At least 10 distinct and interesting questions – 2 points
- **Part 2: Design – 10 points**
  - Design multidimensional model
    - 3 dimensions – minimum, 2 points, xor
    - 5 dimensions, at least one with time, at least one other with hierarchy – 4 points
  - Create Logical Data Map – 4 points
  - Design ETL Process (sequence of transformations) – 2 points
- **Part 3: Implementation – max 6 points**
  - Integration Services (ETL Implementation)
    - 1 points for SQL tasks or DataFlow with no merge/split, xor
    - 2 points for DataFlow with merge/split
    - Additional 0.5 point for each different complex task (e.g. loop, e-mail)
  - Analysis Services (Cube Implementation)
    - 1 point for straight implementation with no additional steps
    - Additional 0.5 point for example of: Calculated Measure, KPI, Partitions, DataMining
- **Part 4: Usage – max 8 points**
  - Data analysis and visualization (Excel, Power BI, Tableau)
    - 2 points for answering questions from Part 1
    - 2 points for interesting visualization of those questions
    - 2 points for generating an example of executive report
    - 2 points for creating an interactive dashboard