AtliQ Hardware: Financial Analysis

Task Decomposition

Project goal:

Conduct a financial analysis of the international hardware company AtlitQ. Research the company's revenue, profit, and margin trends over the past few years to identify key performance drivers, market shifts, and opportunities for growth, using advanced data collection, analysis, and visualization tools.

Questions:

This study is targeted to find out answers to the following questions:

- 1. How have revenue/profits changed over time?
- 2. How manufacturing costs changed over time?
- 3. What categories are most profitable?
- 4. What is gross profit and gross margin over the past few years?
- 5. Are there any seasonal trends in revenue? What is the most profitable month/period of the year/year.
- 6. How does revenue distribution vary across different regions and countries?

These questions provide a comprehensive overview of AtliQ Hardware's financial health, focusing on revenue and profit trends, cost management, profitability by product category, seasonal impacts, and regional performance.

Hypotheses:

To ensure a comprehensive understanding of the company's financial performance and market position, we are going to test the following hypotheses:

- Revenue has steadily increased over the past few years.
- Revenue from international markets has grown at a faster rate compared to the domestic market.
- There are significant seasonal spikes in revenue.

Tools:

This research focuses on analyzing financial statements using a combination of tools for data collection, analysis, visualization, and reporting. Here are the main tools that are going to be used in the study:

- 1) Data collection and storage: SQLite
- 2) Analysis:
 - SQL For statistical analysis and data manipulation.

- Python (with libraries such as Pandas, NumPy, and SciPy) For statistics and visualization.
- 3) Presenting the data in the form of interactive dashboards: Tableau.

The analysis will be done in the Jupyter notebook, all data manipulation will be done using SQL queries. While plotting and statistics will be completed using Python.

Tasks:

- 1. Answer the stated questions.
- 2. Test the hypotheses.

Plan of action:

Step 1: Data overview

Step 3: Financial Analysis

Step 4: Testing hypotheses

Step 5: Make conclusions based on hypothesis

By addressing these questions and hypotheses through detailed data analysis, AtliQ Hardware can gain valuable insights into its financial performance and market dynamics, helping them make informed strategic decisions.