
Insights to Management in Consumer Goods Domain-SQL Project

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Client/Sponsor: AtliQ Hardware (Imaginary Company)

Purpose:

This project aims to provide AtliQ Hardwares management with insights into their business operations, specifically focusing on sales, products, and customers. The insights derived from this analysis will enable management to make data-informed decisions to optimize business strategies and capitalize on growth opportunities.

Scope / Major Project Activities:

The project will focus on extracting and analyzing data from AtliQ Hardwares' databases using SQL queries. The key activities involve:

Activity	Description
Market Analysis	Identifying the markets in the APAC region where the customer "AtliQ Exclusive" operates.
Product Growth Analysis	Calculating the percentage increase in unique products offered in 2021 compared to 2020.
Segment-wise Product Analysis	Determining the unique product count for each segment and ranking them in descending order.
Segment Growth Comparison	Identifying the segment with the highest increase in unique products between 2020 and 2021.
Cost Analysis	Finding the products with the highest and lowest manufacturing costs.
Customer Discount Analysis	Identifying the top 5 customers in the Indian market who received the highest average pre-invoice discount percentage in the fiscal year 2021.

Sales Performance Analysis	Generating a report of gross sales amount for the customer "AtliQ Exclusive" for each month to identify high and low-performing months.
Quarterly Sales Analysis:	Determining the quarter in 2020 with the maximum total sold quantity.
Channel Contribution Analysis	Identifying the channel that contributed the most to gross sales in the fiscal year 2021 and quantifying its percentage contribution.
Top Product Analysis	Determining the top 3 products in each division with the highest total sold quantity in the fiscal year 2021.

This project does not include:

- Implementing changes based on the analysis findings
- Analyzing data from sources other than the provided databases

Deliverables:

Deliverable	Description/ Details
List of markets for "Atliq Exclusive" in APAC	A list of markets where "Atliq Exclusive" operates within the Asia Pacific region.
Percentage increase in unique products (2021 vs 2020)	A table showing the number of unique products in 2020 and 2021, along with the percentage change.
Segment-wise unique product count	A table displaying the unique product count for each segment, sorted in descending order.
Segment with highest product increase (2021 vs 2020)	A table showing the segment with the most significant increase in unique products between 2020 and 2021, including product counts for both years and the difference.
Products with highest and lowest manufacturing costs	A table containing the product codes and manufacturing costs of the products with the highest and lowest costs.
Top 5 customers with high average discount	A table listing the top 5 customers in India with the highest average pre-invoice discount percentage in 2021, including customer codes and average discount percentages.
Gross sales report for "Atliq Exclusive"	A table showing the gross sales amount for "Atliq Exclusive" for each month, allowing for the identification of high and low-performing months.

Quarter with maximum total sold quantity in 2020	A table displaying the quarter in 2020 with the highest total sold quantity.
Channel with highest contribution to gross sales	A table presenting the channel that contributed the most to gross sales in 2021, along with its percentage contribution.
Top 3 products by total sold quantity in each division	A table listing the top 3 products in each division based on total sold quantity in 2021, including product codes, product names, total sold quantity, and rank order within the division.

Schedule Overview / Major Milestones:

The expected schedule for the project. This can be defined by milestones (e.g. "all data is cleaned and processed"), periods of time ("Week 1 / Week 2"), or other ways based on the needs of the project.

Milestone	Expected Completion Date	Description/Details
<i>Data extraction and cleaning</i>	<i>Week 1</i>	<i>Extract relevant data from the database and perform any necessary cleaning.</i>
<i>SQL Query</i>	<i>Week 2</i>	
<i>Data Analysis and Visualization</i>	<i>Week 3</i>	