

Analysis of Amazon Sales Report (Power BI)

This project is a complete Power BI analysis and dashboard of Amazon sales products for several years (2017–2019). It contains thorough visualizations, key performance indicators (KPIs), and business insights derived from the sales information.

Project Description:

Report Title: Amazon Sales Report

Time Period Covered: January 2017 – December 2019

Total Sales: \$18.14 Crore+

Total Profits: \$7.53 Crore+

Total Quantity Sold: 28.56 Lakh+ units

Tools Used:

- Power BI Desktop
- DAX (Data Analysis Expressions)
- CSV / Database inputs (presumed source)

Report Contents:

1. Top Products Analysis Shows:

- Product-wise Quantity, Sales Price, Sales Amount, Profits, and Profit Percentage.
- Products such as Better Large Canned Shrimp, High Top Dried Mushrooms, and Frozen Cheese Pizza were among top performers.
- Most products reported profit margins of more than 100%, reflecting good pricing power.

2. Sales & Profit Trend Analysis (Yearly/Quarterly/Monthly):

- Dynamic graphs demonstrating Sales Amount & Profit Growth over years.
- 2017 and 2019 were the most profitable years in terms of both Sales and Profit.
- Percentage change and profit contribution by quarter.

3. Daily & Monthly Sales Patterns:

- Sales by day of the month and day of the week.
- Highest sales seen on Sundays.
- Dailies showing considerable fluctuations during mid-month and month-end stretches.

4. Profit Percentage vs Cost:

- Profit percentage versus COGS.
- Q3 2019 (67.97%) had the highest gross margins.
- Data can inform optimal product pricing and vendor negotiations.

5. Visualizations at the Item Level:

Top 5 Products by:

- Sales Amount
- Quantity Sold
- Profit

6. Quarterly Profitability & Discount Insights:

Per quarter analysis consists of:

- List Price, Discounts, Final Sales Amount
- Cost, Profit %, and % of Total Profit
- Monitors seasonal fluctuations and discount effects.

7. Sales & Profits by Time Dimension:

Dimension Best Performer

- Year 2017
- Day of Week Sunday
- Quarter Q3 2019
- Month August

8. Top Customers:

- Reports Top 10 Customer Keys by:
 - Total Sales Contribution
 - Profit Generated
- Customer Key 10021485 contributed \$11.4M worth of sales and \$5.2M in profits.

9. Invoice-Level Detail:

- Displays daily bills with item name, quantity, sales amount, profit, and profit %.
- Example:
 - 01-Jan-2017: "Atomic Mint Chocolate Bar" – Profit 101.17%
 - 05-Jan-2017: "American Beef Bologna" – Profit 61.04%

10. Month-over-Month Growth:

- Monitors month-to-month growth:
 - E.g., Feb 2017 vs Jan 2017 → -16.05% sales
 - Jun 2017 spike → +31.66% growth
- Helpful in highlighting high/low-performing periods.

Business Insights:

- Q3 2019 was the most profitable quarter (₹86.02 Lakh, +119% growth).
- Sunday generated the highest sales and profits for all years.
- Low-performing items that have losses must be eliminated or re-planned.
- Top 10 customers made huge contributions to overall profits — must be retained through loyalty interventions.

Suggestions for Improvement:

- Re-target campaign on weekends (particularly Sundays) should be considered.
- Emphasize repeat buys from high-profit customer keys
- Re-examine discounting plans on low-margin or loss leaders.
- Build inventory on high-margin, high-volume goods such as canned fish and frozen bread.