



141 lines (118 loc) · 8.79 KB

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# Supply Chain Management Analysis Using EXCEL



## Overview

The **Supply Chain Management Dashboard** provides a holistic view of an organization's supply chain performance. It highlights key business metrics such as Sales, Profit, Quantity Sold, Number of Orders, and Profit Margin, enabling data-driven decisions for better operational efficiency and profitability.

**What is Supply Chain Management Analysis?**  
It is the process of examining supply chain data to optimize operations, reduce costs, improve efficiency/profitability and enhance customer satisfaction.

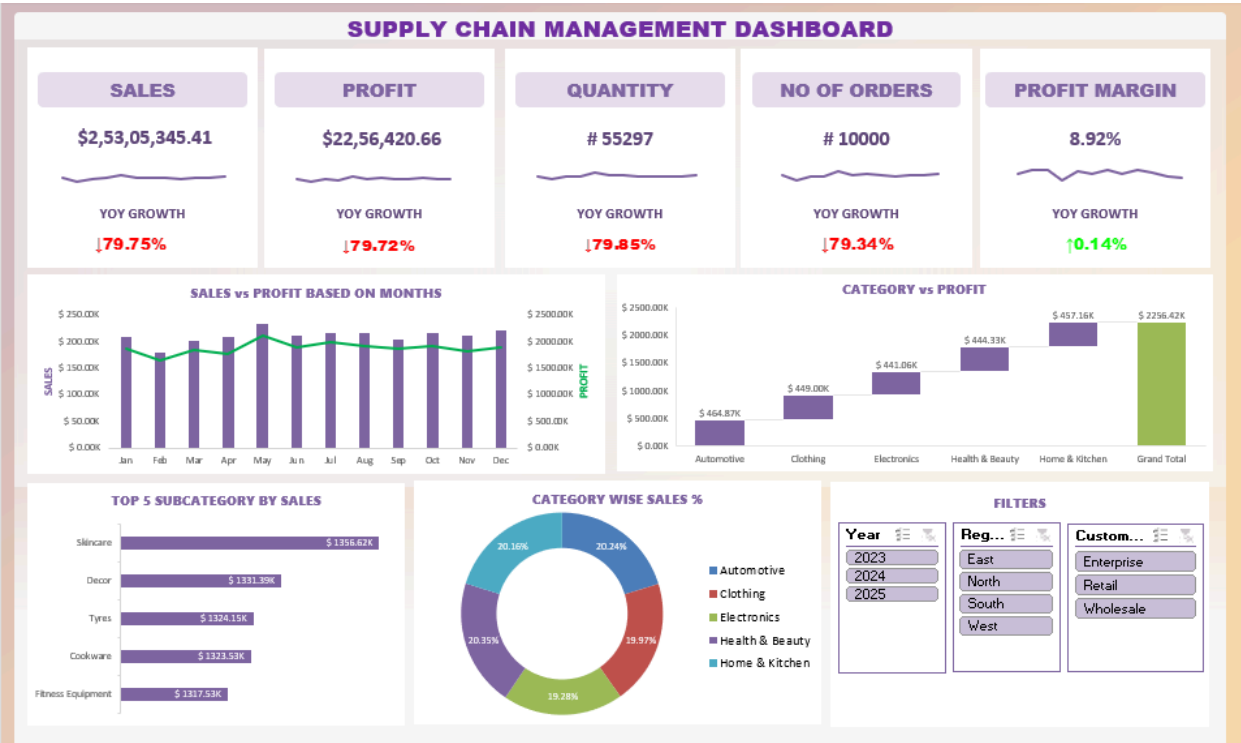
**Functioning of Supply Chain Management**  
It manages the flow of goods and information from suppliers to customers through planning, production, and distribution.

**Application of Supply Chain Management**  
Used in inventory control, demand forecasting, logistics, procurement, and customer service improvement.

**Existing Challenges of Supply Chain Management**  
Demand fluctuations, rising costs, supplier risks, lack of visibility, and global disruptions.

**Define the Goal of the SCM Dashboard**  
To provide real-time insights into supply chain performance, track KPIs, and support data-driven decision-making.

DASHBOARD



1. Key Performance Indicators (KPIs)

The top section of the dashboard displays five main KPIs, summarizing the organization’s overall performance:

Metric	Value	Year-over-Year (YOY) Growth	Insights
Sales	\$2,53,05,345.41	▼ 79.75%	Indicates a significant decrease in sales compared to the previous year.
Profit	\$22,56,420.66	▼ 79.72%	Profit has dropped in line with reduced sales, suggesting cost structure remained similar.

Metric	Value	Year-over-Year (YOY) Growth	Insights
Quantity Sold	55,297 Units	▼ 79.85%	Volume of products sold has reduced drastically, affecting overall revenue.
Number of Orders	10,000	▼ 79.34%	Order frequency has fallen, potentially due to market conditions or customer retention issues.
Profit Margin	8.92%	● 0.14%	Despite declines in other metrics, profit margin improved, reflecting better cost management or pricing strategy.

## 2. Sales vs Profit Based on Months

This chart compares monthly sales (bar chart) with profit trends (line chart) across the year.

- Sales and profit fluctuate moderately month to month, showing stable but slightly uneven performance.
- Peaks are observed around May and November, suggesting seasonal or promotional sales impacts.
- Overall, monthly patterns are consistent, indicating steady demand across periods despite the annual decline.

## 3. Category vs Profit

This waterfall-style visualization breaks down profit contributions by product categories:

- Home & Kitchen leads with the highest profit (~\$457.16K), followed by Health & Beauty and Electronics.
- Automotive and Clothing generate lower profits, possibly due to higher costs or lower margins.
- The Grand Total Profit reaches \$2,256.42K, consolidating performance across all categories.

## 4. Top 5 Subcategories by Sales

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The top-performing subcategories by sales are:

- **Skincare** – \$1,356.62K
- **Decor** – \$1,331.39K
- **Tyres** – \$1,324.13K
- **Cookware** – \$1,323.53K
- **Fitness Equipment** – \$1,317.93K

These subcategories dominate the sales contribution, with Skincare holding the top position, reflecting strong demand in the Health & Beauty segment.

## 5. Category-Wise Sales %

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A donut chart displays the percentage share of total sales by each product category:

- **Automotive** – 20.24%
- **Clothing** – 20.24%
- **Electronics** – 19.97%
- **Health & Beauty** – 19.28%
- **Home & Kitchen** – 20.15%

Sales are evenly distributed across categories, showcasing a balanced portfolio with no over-dependence on any single product group.

## 6. Filters Section

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The dashboard includes interactive filters that enable customized data exploration:

- **Year** – 2023, 2024, 2025 – allows trend analysis over time.
- **Region** – East, North, South, West – supports regional performance comparison.
- **Customer Type** – Enterprise, Retail, Wholesale – helps analyze segment-wise sales behavior.

These filters make the dashboard dynamic and user-friendly, enabling stakeholders to drill down into specific insights.

## 7. Key Insights & Interpretation

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- The company experienced a sharp decline (~79%) in key KPIs compared to the previous year, signaling possible supply chain or market challenges.

- Profit margin improvement (+0.14%) suggests operational optimization or cost-cutting efforts.
- Home & Kitchen and Health & Beauty categories are performing strongly in profitability.
- The Skincare subcategory stands out as the top revenue driver.
- The balance in category-wise sales % indicates diversified revenue streams, which is positive for long-term stability.
- The consistent monthly trend shows controlled performance without extreme volatility.

## 8. Conclusion

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The dashboard effectively visualizes the company's supply chain performance, helping management identify strong product segments and areas needing improvement. While overall sales and orders have declined significantly, the profit margin growth highlights improved efficiency. Future focus should be on increasing sales volume while maintaining the current cost control strategies to achieve sustainable growth.

## SWOT Analysis of Supply Chain Management Dashboard

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### 1. Strengths

- **Comprehensive KPI Tracking:** The dashboard covers all critical supply chain metrics — Sales, Profit, Quantity, Orders, and Profit Margin — offering a complete view of performance.
- **Improved Profit Margin:** Despite reduced sales, profit margin increased by 0.14%, indicating better operational control and cost efficiency.
- **Balanced Category Contribution:** Sales are evenly distributed across categories (each ~20%), reducing dependence on any single product segment.
- **High Profit from Key Categories:** Home & Kitchen and Health & Beauty deliver strong profits, reflecting well-performing segments.
- **Interactive Filtering:** The inclusion of filters by Year, Region, and Customer Type enhances data exploration and helps stakeholders perform in-depth analysis.

### 2. Weaknesses

- **Major YOY Decline:** All major KPIs (Sales, Profit, Orders, Quantity) show a ~79% decline, signaling reduced demand, pricing challenges, or supply inefficiencies.
- **Low Sales Volume:** A significant reduction in quantity sold (55,297 units) indicates declining market penetration or product turnover.

- **Category Profit Gaps:** Automotive and Clothing categories underperform compared to others, hinting at margin or supply issues.
- **Limited Monthly Growth:** Sales and profit trends remain flat across months with minor peaks, suggesting lack of seasonal or promotional optimization.
- **Possible Data Lag:** The YOY comparison might not reflect real-time performance if data updates are infrequent or inconsistent.

### 3. Opportunities

- **Targeted Marketing and Promotions:** Increase focus on high-performing categories (Home & Kitchen, Health & Beauty) to leverage their strong profitability.
- **Category Optimization:** Re-evaluate underperforming categories (Automotive, Clothing) — adjust pricing, suppliers, or distribution channels.
- **Regional Strategy Enhancement:** Use filters to identify and strengthen weak regions — implement localized offers or supply chain adjustments.
- **Customer Segmentation:** Analyze trends by customer type (Retail, Wholesale, Enterprise) to tailor strategies for each segment.
- **Automation & Forecasting:** Incorporate predictive analytics (e.g., demand forecasting, inventory optimization) to improve efficiency and reduce costs.

### 4. Threats

- **Market Competition:** Competitors offering better prices or faster delivery could capture market share, worsening the sales decline.
- **Supply Chain Disruptions:** Dependence on specific suppliers or regions may risk further performance drops if disruptions occur.
- **Changing Consumer Preferences:** If product mix doesn't align with market demand, sales might continue to fall despite efficiency improvements.
- **Economic Slowdown:** Broader market or economic factors could suppress demand, especially in non-essential categories like Decor or Fitness Equipment.
- **Profitability Risk:** If costs rise or sales continue to fall, maintaining the improved profit margin could become difficult

## Summary

Category	Key Points
Strengths	Strong KPIs tracking, better profit margin, balanced sales distribution, interactive filters
Weaknesses	YOY decline in performance, low sales volume, weak categories, flat trends

Category	Key Points
Opportunities	Marketing focus, category improvement, regional optimization, customer segmentation
Threats	Competition, supply disruptions, changing demand, economic instability

## Strategic Recommendation

To strengthen the supply chain, the company should:

- Focus on boosting sales and order volume while retaining the improved profit margin.
- Reallocate resources toward profitable categories and reduce inefficiencies in underperforming ones.
- Implement data-driven forecasting and automation to enhance decision-making and supply chain agility.

### SUPPLY CHAIN MANAGEMENT EXCEL FILE LINK :

- Google Drive Link : [SUPPLY CHAIN MANAGMENT](#)