

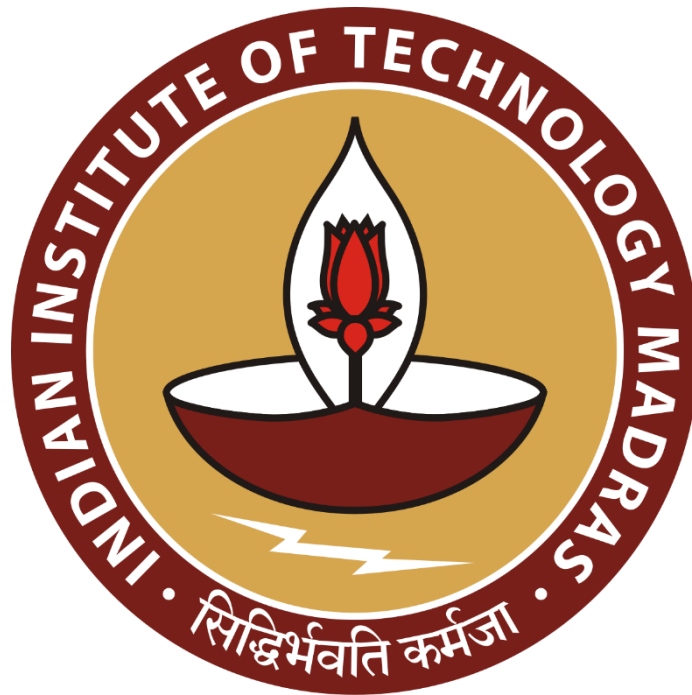
Revitalizing Sales and Inventory Management for Popular Electricals: A Data-Driven Analysis and Optimization Approach

A Final Submission Report for the BDM Capstone Project

Submitted by

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Table of Contents

1. Executive Summary	2
2. Detailed Explanation of Analysis Process/Method	2
3. Results and Findings	10
4. Interpretation of Results and Recommendations	18

1. Executive Summary

This project focuses on Popular Electricals and Saniwares, a B2C electrical retail business in Erattupetta, Kottayam District, Kerala. The business, owned by Sri. G Suresh Babu, faces declining sales, inefficient inventory management, and growing competition from online markets, impacting growth and profitability. I assured the owner that data analysis could provide actionable insights to address these challenges.

To tackle these issues, I analysed summary reports from Tally for March to August 2024, focusing on key products. The data was cleaned, organized, and analysed using Excel to identify trends and insights. Key performance metrics were calculated, examining sales performance across products, customer segments, and seasonal patterns. The analysis also focused on issues like overstocking, stock outs, and inventory turnover rates.

The findings led to several recommendations aimed at optimizing stock levels, reducing inventory inefficiencies, and boosting sales. These strategies are designed to balance product supply with customer demand, enhance customer satisfaction, and improve product availability, helping the business better compete with online markets.

The expected outcomes of this project are increased profitability, improved inventory management, and sustained growth. By implementing data-driven strategies, Popular Electricals and Saniwares can regain its competitive edge and achieve long-term success.

2. Detailed Explanation of Analysis Process/Method

Excel was used as the primary tool for this analysis. The data was cleaned and organized into a structured format. Key metrics, including Total Sales Volume, Total Revenue, Average Revenue, Profit, Cost Price, and Selling Price, were calculated using Excel functions like SUM and AVERAGE. Summary statistics of revenue were also obtained using the Data Analysis Tool in Excel.

Pivot tables were employed to gain deeper insights, providing a flexible way to analyse sales, revenue, and inventory patterns across different products, customer segments, and time periods. Key findings were visualized through graphs, helping to identify trends and anomalies.

Revenue	
Mean	97719.93417
Standard Error	50364.83295
Median	32218.505
Mode	#N/A
Standard Deviation	174468.8992
Sample Variance	30439396777
Kurtosis	8.100515142
Skewness	2.805777773
Range	605229.44
Minimum	7949.17
Maximum	613178.61
Sum	1172639.21
Count	12

Table 1: Summary Statistics of the column Revenue

This approach led to valuable insights into the business's sales performance and inventory management, which were then used to create actionable recommendations for improving profitability and optimizing inventory practices.

For a comprehensive understanding of the data, the following methods were employed:

2.1 Brand Insight

To evaluate brand performance, I focused on key inventory and sales metrics for the selected period, namely Total Opening Stock, Purchases, Sales, and Closing Stock. These data points provided a comprehensive overview of each brand's performance.

A new worksheet titled "Brands" was created using relevant brand data from the original dataset. To facilitate the analysis, a pivot table was constructed based on this sheet. In the pivot table:

- ITEM was placed in the Filter section, allowing for easy filtering of data by specific items.
- Brand was placed in the Row Labels section to group the data by individual brand, making it easier to compare performance across brands.
- Sum of Revenue was placed in the Values section (\sum values), aggregating the total revenue generated by each brand during the period under review.

This setup enabled the evaluation of each brand's contribution to overall revenue, the tracking of performance trends, and the identification of top-performing brands. The pivot table made it easy to summarize the data and uncover valuable insights for making informed decisions regarding brand strategy and inventory management.

2.2 Net Inventory Movement

The relationship between Opening Stock and Closing Stock provides crucial insights into inventory dynamics over a given period, helping to identify trends and potential issues in business operations. To facilitate a more detailed analysis, I included brand data for each item, allowing me to break down the movement of inventory by brand and make more accurate inferences based on the findings.

The possible outcomes of this analysis and their interpretations are as follows:

i. Opening Stock < Closing Stock

Interpretation: The stock has increased during the period.

- Possible Causes:
 - Over-purchasing: More inventory was procured than was sold or used, leading to an accumulation of stock.
 - Low Sales Demand: Fewer goods were sold than expected, resulting in a buildup of inventory.
 - Seasonal Preparation: The business may have stockpiled inventory in anticipation of a future high-demand period (e.g., a festive season or promotional period).
 - Returns: A higher volume of customer returns or restocking of unsold items contributed to the increase in stock levels.

ii. Opening Stock = Closing Stock

Interpretation: There was no net change in inventory during the period.

- Possible Causes:

- Perfect Balance: The amount of goods sold or used during the period was approximately equal to the amount of inventory replenished, leading to no net change in stock.
- Stable Demand: Consistent sales and replenishment cycles ensured that inventory levels remained balanced throughout the period.
- Minimal Activity: Neither significant sales nor stock purchases occurred during this period, leading to a neutral inventory movement.

iii. Opening Stock > Closing Stock

Interpretation: The stock has decreased during the period.

- Possible Causes:
 - High Sales Demand: A higher-than-expected sales volume resulted in more goods being sold than were replenished, causing a decrease in stock levels.
 - Insufficient Replenishment: Inventory purchases did not keep up with the rate of sales or usage, leading to a depletion of stock.
 - Shrinkage: Losses due to theft, wastage, or damage that were not accounted for in the opening and closing stock figures.
 - Stock Clearance: Intentional reduction of stock levels through promotions, discounts, or product clearance sales.

This analysis provides a clear picture of inventory movement patterns and enables the identification of underlying causes, which can be crucial for making informed decisions on purchasing, stock management, and demand forecasting. It also helps in identifying potential issues such as overstocking, under stocking, or inefficiencies in the supply chain.

2.3 Sales vs. Stock Analysis

a) Stock Turnover Rate

The Stock Turnover Rate (also referred to as the Inventory Turnover Ratio) is a crucial metric that helps assess how efficiently a business manages and utilizes its inventory. It indicates how often the inventory is sold and replaced during a specified period, reflecting the efficiency of inventory management and sales performance.

The formula for calculating the Stock Turnover Rate (STR) is as follows:

$$STR = \frac{\text{Cost Of Goods Sold(COGS)}}{\text{Average Inventory}}$$

Where:

- Cost of Goods Sold (COGS) refers to the total cost of the goods sold during the period.

$$COGS = \text{Opening Inventory} + \text{Purchase during the period} \\ - \text{Closing Inventory}$$

- Average Inventory is the average value of inventory at the beginning and end of the period, typically calculated as:

$$\text{Average Inventory} = \frac{\text{Opening Inventory} + \text{Closing Inventory}}{2}$$

- High STR: A high turnover rate indicates that the business is efficiently selling and replenishing its inventory, suggesting strong demand for products and good inventory management practices.
- Low STR: A low turnover rate may signal sluggish sales or overstocking, which could lead to higher holding costs, obsolete inventory, and reduced profitability.

b) Days of Inventory (DOI)

Days of Inventory (DOI), also known as Days Inventory Outstanding (DIO) or Days Sales of Inventory (DSI), is an important financial metric used to measure the average number of days required to sell inventory during a specific period. It serves as a key indicator of operational efficiency and inventory management practices.

The formula for calculating Days of Inventory (DOI) is:

$$DOI = \frac{\text{Average Inventory}}{\text{COGS per Day}}$$

Where:

- Average Inventory represents the mean value of the inventory at the beginning and end of the period.
- COGS per Day refers to the average Cost of Goods Sold (COGS) on a daily basis, calculated as:

$$COGS \text{ per Day} = \frac{\text{Total COGS for the Period}}{\text{Number of Days in the Period}}$$

- For the period from 1st March 2024 to 31st August 2024, which consists of 184 days, COGS per Day was calculated by dividing the total COGS for the period by 184 days.

Interpretation:

- Lower DOI: A lower DOI indicates that inventory is moving quickly, suggesting efficient inventory management or high demand for products. This is generally considered a positive outcome, as it demonstrates that inventory is being sold and replenished rapidly.
- Higher DOI: A higher DOI may indicate overstocking, slow-moving inventory, or inefficiencies in inventory management. This suggests that inventory is being held for longer periods, which could lead to increased holding costs, potential obsolescence, or the need for markdowns.

Monitoring the DOI provides valuable insights into the effectiveness of inventory management strategies and allows businesses to make informed decisions to improve inventory turnover and optimize stock levels.

2.4 ABC Analysis

ABC Analysis is a systematic approach in inventory management that classifies items into three categories—A, B, and C—based on their significance to the business. This method is grounded in the Pareto Principle (80/20 rule), which posits that a small proportion of items (around 20%) typically account for the majority (70-80%) of the overall value.

Classification of Items:

1. Category A:
 - High-value items with a low frequency of sales.

- Constitute the top 20% of items, contributing to 70-80% of the total value.
2. Category B:
- Moderate-value items with moderate sales frequency.
 - Account for the next 30% of items, contributing to approximately 15-25% of the total value.
3. Category C:
- Low-value items with a high frequency of sales.
 - Comprise the remaining 50% of items, contributing to about 5-10% of the total value.

Methodology:

1. A new table was created containing only item names and their corresponding sales revenue.
2. The table was sorted in descending order based on sales revenue, ensuring that high-revenue items were listed first.
3. The percentage of total revenue contributed by each item was calculated using the formula:

$$percentage = \frac{revenue\ of\ each\ item}{total\ revenue} \times 100$$

4. The cumulative percentage of revenue was determined by successively adding the revenue percentage of each item to the sum of all preceding percentages.
5. The products were categorized into A, B, or C using the IF function in Excel. The applied formula was:

$$= IF(E25 <= 0.7, "A", IF(E25 <= 0.9, "B", "C"))$$

Where:

- "A" corresponds to items contributing up to 70% of total revenue.
- "B" corresponds to items contributing between 70% and 90%.
- "C" corresponds to items contributing above 90%.

ABC Analysis helps businesses prioritize their efforts and allocate resources efficiently, ensuring that critical high-value items are managed effectively while minimizing the time and

resources spent on lower-value items. This method supports better decision-making in inventory control, procurement planning, and resource allocation.

2.5 Sales and Purchase Correlation Analysis

Sales and Purchase Correlation Analysis helps determine the relationship between sales and purchases of the same items over a specific period. The correlation coefficient quantifies the strength and direction of this relationship, providing valuable insights into inventory and sales alignment. The steps followed:

1. Table Creation: A new table has been created with the columns: Item, Sales, and Purchases.
2. Using the CORREL Function: The correlation coefficient was calculated using Excel's CORREL function with the syntax:

$$= \text{CORREL}(\text{Sales Range}, \text{Purchases Range})$$

This function computes the Pearson correlation coefficient for the two data sets.

3. Interpretation of the Correlation Coefficient (r): The correlation coefficient r ranges from -1 to 1.
 - $r = 1$: Perfect positive correlation. As purchases increase, sales increase proportionally.
 - $r = 0$: No correlation. Sales and purchases are unrelated.
 - $r = -1$: Perfect negative correlation. As purchases increase, sales decrease proportionally.
4. Scatter Plot Creation: A scatter plot was generated to visualize the relationship between sales and purchases. The trends observed in the scatter plot were interpreted as follows:
 - A positive slope indicates a positive correlation.
 - A flat or no clear trend suggests little to no correlation.
 - A negative slope indicates a negative correlation.

Significance of the Analysis:

- **Positive Correlation:** Indicates a strong alignment between sales and purchases, suggesting that purchasing decisions are well-aligned with sales demand.
- **No Correlation:** Highlights potential inefficiencies, such as over-purchasing or stock outs.
- **Negative Correlation:** Suggests an inverse relationship, potentially due to factors like unsold stock accumulation or pricing issues.

This analysis provides actionable insights for optimizing purchasing strategies, ensuring they align with sales trends to minimize excess inventory and avoid stock outs.

3. Results and Findings

The analyses conducted on the sales and inventory data yielded the following key findings:

3.1 Brand Insight

A pivot table was created to analyze the performance of various brands based on sales and inventory data. The filter option was used to examine individual items, allowing the identification of the most popular brands for each category. The summarized findings are:

ITEM	MOST POPULAR BRAND
1 SQMM CABLE	FINOLEX
12 WAY D/B BOX	DILTECH
6 A 1 WAY SWITCH	LEGRAND
6 W CEILING LED	RR
9 W LED BULB	GM
CEILING FAN	CROMPTON
LONG BODY TAP	CERA
PVC SUCTION HOSE	STAR
S TRAP	STAR

Table 2 : Most Popular Brands

An intriguing observation from the analysis is that certain brands appear across multiple products. However, when examining the most popular items, some of these recurring brands are included, while others are noticeably missing.

The following graph represents one of the plots created for brand analysis, and a similar approach is applied to other products.

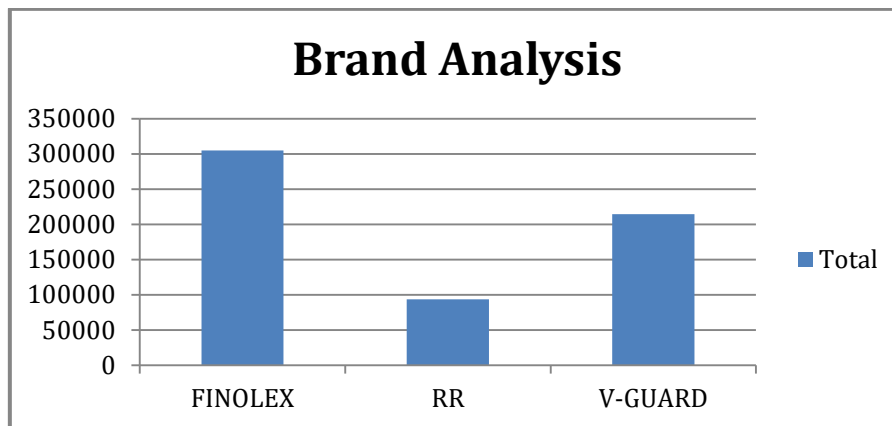


Chart 1 : Brand Analysis for 1 SQMM cable

The following key insights emerged from the brand analysis::

- STAR: This brand is available for both PVC suction hose and S Trap, and it is the most popular brand for both items.
- GM: Available in the 9W LED Bulb and 6A 1-Way Switch, but it is only popular in the 9W LED Bulb according to our data.
- CERA: Represents both S Trap and Long Body Tap, but it is the best seller in the Long Body Tap category.
- RR: Offers 1 sqmm Cable, 6W Ceiling Light, and 9W LED Bulb, but is most popular only in the 6W Ceiling Light category.
- V-Guard: Despite having products like the 1 sqmm Cable and 12-way D/B Box, it did not become a best seller in any category.

3.2 Net Inventory Movement

The analysis of net inventory movement was conducted using brands for each product, with the following short forms and color coding applied:

- i. CB > OB: Opening Stock is less than Closing Stock.
- ii. Nearly Equal: Opening Stock is approximately equal to Closing Stock.
- iii. OB > CB: Opening Stock is greater than Closing Stock.

The results have been summarized in a tabular format.

ITEM	BRAND	INVENTROY
1 SQMM CABLE	FINOLEX	Nearly Equal
	RR	CB>OB
	V-GUARD	OB>CB
6W CEILING LED	G-HOME	OB>CB
	RR	OB>CB
9 W LED BULB	GM	CB>OB
	RR	CB>OB
12 WAY D/B BOX	DILTECH	Nearly Equal
	V-GUARD	OB>CB
	L&T	CB>OB
CEILING FAN	SILVER	Nearly Equal
	CROMPTON	OB>CB
6 A 1 WAY SWITCH	LEGRAND	CB>OB
	GM	OB>CB
	INDOASIAN	OB>CB
LONG BODY TAP	CERA	CB>OB
	MBRAND	OB>CB
PVC SUCTION HOSE	STAR	OB>CB
	LENORA	CB>OB
S TRAP	STAR	OB>CB
	CERA	CB>OB

Table 3: Inventory Analysis

- The analysis of the results reveals that only three products had opening stock equal to closing stock: 1 SQMM Cable (Finolex), 12 Way D/B Box (Diltech), and Ceiling Fan (Silver). These products represent the most popular brands, indicating a balance between sales and replenishment, except for the Ceiling Fan (Silver). In the case of the fan, this trend suggests stagnation in sales. This can be confirmed by the sales data, which shows that despite no purchases over the past six months, stocks remained available at the end of the period, indicating that it is a slow-moving item.

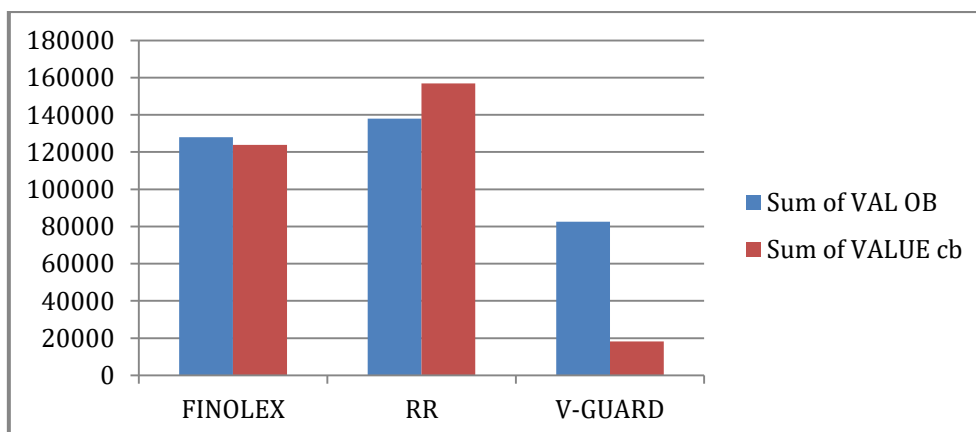


Chart 2: Opening Stock and Closing Stock of 3 Brands of 1 SQMM Cable

- Instances where Opening Stock < Closing Stock indicate stock accumulation or over-purchasing, which could be due to inefficiency, overstocking, or low sales. In this data, products like the 6A 1 Way Switch (Legrand), 9W LED Bulb (GM & RR) show overstocking, as confirmed by the sales data. The remaining three products show low sales during the period. Interestingly, the Long Body Tap (Cera) appears as an outlier due to negative sales, an anomaly explained in the proposal report.
- 1 SQMM Cable (V-Guard) and 6A 1 Way Switch (Indoasian) demonstrate higher-than-expected sales, which could lead to stockouts. Although $OB > CB$ for products like Ceiling Fan (Crompton), Switch (GM), and S Trap (Star), the difference between opening and closing stock is minimal, indicating that these products are closely monitored. On the other hand, Ceiling LED Light (RR) and D/B Box (L&T) reflect overstocking, as sales have not met expectations.
- Ceiling LED (G-Home) and Long Body Tap (MBrand) show very low figures across all attributes, including sales and inventory. Notably, PVC Suction Hose (Star) appears as an outlier. It shows $OB > CB$ in value but $OB < CB$ in volume, possibly due to its selling price being lower than the cost price. Most importantly, this category contains more products than the other two, indicating inefficient inventory management.

3.3 Sales vs. Stock Analysis

a) Stock Turnover Rate

A high Stock Turnover Rate (STR) indicates efficient inventory management, meaning the business sells its inventory quickly. Conversely, a low STR suggests overstocking or inefficiencies in sales, leading to inventory being held for longer periods. The three instances are color-coded for better understanding:

- Low STR (<1.0): This indicates slow inventory turnover, suggesting overstocking or low sales. Products with an STR less than 1 are highlighted in yellow. These products include Ceiling LED, S Trap, Ceiling Fan, and D/B Box. A low STR suggests slow-moving inventory that ties up capital, increases holding costs, and risks obsolescence.
- Moderate STR (1.0–3.0): This range indicates reasonable inventory management, with inventory turning over one to three times during the period. Most products fall

into this category, with STR values ranging from 1.20 to 2.45. These products are considered well-maintained inventory based on their sales performance.

- High STR (>3.0): This suggests strong inventory performance, with frequent sales and replenishment. Only one product falls into this category: Wiring Pipe. A high STR indicates better cash flow and lower holding costs, but it is important to ensure safety stock levels are adequate to meet demand.

	OPENING STOCK		PURCHASE		SOLD OUT		CLOSING STOCK		COGS	AVG INVENTORY	STOCK TURNOVER RATE	COGS PER DAY	DOI
ITEM	TOT OBNO	TOT VAL OB	TOT PURNO	TOT PURVAL	TOT SOLD NO	TOT SOLD VAL	TOT CB NO	TOT CB VAL					
1 6W CEILING LED	296	71080	0	0	39	7949.17	257	61700	9380	66390	0.14	50.97826087	1302.32
2 S TRAP	24	33476.04	12	10353.48	10	12076.21	26	32253.85	11575.67	32864.945	0.35	62.91125	522.4017
3 CEILING FAN	59	108941.53	28	45087	35	61821.97	52	92722.23	61306.3	100831.88	0.61	333.186413	302.629
4 12 WAY D/B BOX	15	22202.76	21	14206.41	20	20057.74	16	19585.57	16823.6	20894.165	0.81	91.4326087	228.5198
5 1 HP PUMPS	4	38137.28	0	0	3	27457.62	1	9534.32	28602.96	23835.8	1.20	155.4508696	153.3333
6 PVC SUCTION HOSE	330	25844.5	1200	47478	820	52197.6	710	36126.4	37196.1	30985.45	1.20	202.1527174	153.2774
7 LONG BODY TAP	5	4450	10	3718	11	11974.64	4	3041.8	5126.2	3745.9	1.37	27.85978261	134.4555
8 6 A 1 WAY SWITCH	696	17093.53	1200	30240	1222	29597.28	674	18413.62	28919.91	17753.575	1.63	157.1734239	112.9553
9 1 SQMM CABLE	336	348632.68	570	543037.2	605	613178.61	301	298919.08	592750.8	323775.88	1.83	3221.471739	100.5056
10 9 W LED BULB	172	13760	1185	41054.84	830	56290.94	527	19903.58	34911.26	16831.79	2.07	189.7351087	88.71205
11 PVC PIPE	678.9	99671.58	1800	170705	1962.06	245197.7	516.84	66775.35	203601.23	83223.465	2.45	1106.528424	75.21132
12 20 MM WIRING PIPE	300	6864	1000	22880	1153	34839.73	147	3363.36	26380.64	5113.68	5.16	143.3730435	35.66696

Table 4: STR and DOI Calculation

b) Days of Inventory

The results from calculating the Days of Inventory (DOI) align closely with the Stock Turnover Rate (STR) calculations. The product with the highest STR (5.16) has the lowest DOI (36 days), while the product with the lowest STR (0.14) has the highest DOI (1302 days).

A high DOI indicates excess inventory, which can lead to challenges in cash flow, as capital is tied up in inventory, reducing profitability. In contrast, a low DOI signifies efficient inventory management, higher cash flow, and potential risks such as stock outs.

3.4. ABC Analysis

- During the ABC analysis, only one item falls under Category A: the 1 SQMM Cable, which is the highest revenue-earning product in the shop. Products like PVC Pipe, Ceiling Fan, LED Bulb, and PVC Suction Hose fall under Category B, while all other products are classified under Category C. This analysis aligns with the Pareto principle, where 20% of the products generate 80% of the revenue.

- The purpose of the ABC analysis is to allocate more focus and resources to Category A products, which are the most profitable, while minimal effort is dedicated to Category C, which includes lower-value items.

ITEM	AVERAGE REVENUE	SALES %	CUMULATIVE %	CATEGORY
1 SQMM CABLE	102196.44	52%	52%	A
PVC PIPE	40866.28	21%	73%	B
CEILING FAN	10303.66	5%	78%	B
9 W LED BULB	9381.82	5%	83%	B
PVC SUCTION HOSE	8699.54	4%	88%	B
20 MM WIRING PIPE	5806.62	3%	91%	C
6 A 1 WAY SWITCH	4932.88	3%	93%	C
1 HP PUMPSET	4576.27	2%	96%	C
12 WAY D/B BOX	3342.96	2%	97%	C
S TRAP	2012.70	1%	98%	C
LONG BODY TAP	1995.77	1%	99%	C
6W CEILING LED	1324.86	1%	100%	C
TOTAL REVENUE	195439.80			

Table 5: Cumulative Frequency

Insights from ABC Analysis:

i. Focus on "A" Items:

- Optimize inventory levels to prevent stock outs.
- Conduct regular demand forecasting and supplier reviews to ensure availability.
- Prioritize sales strategies and promotions to maximize revenue for high-value products.

ii. Manage "B" Items:

- Balance effort and resources to maintain these items efficiently.
- Optimize stock levels based on their moderate demand to avoid overstocking or under stocking.

iii. Simplify "C" Items:

- Reduce holding costs by maintaining minimal stock of low-demand items.
- Consider removing slow-moving "C" items from inventory to streamline operations.

Using Table 5, a revenue Pareto chart was created to illustrate the distribution of revenue across different product categories, providing a clear visual representation of the insights.

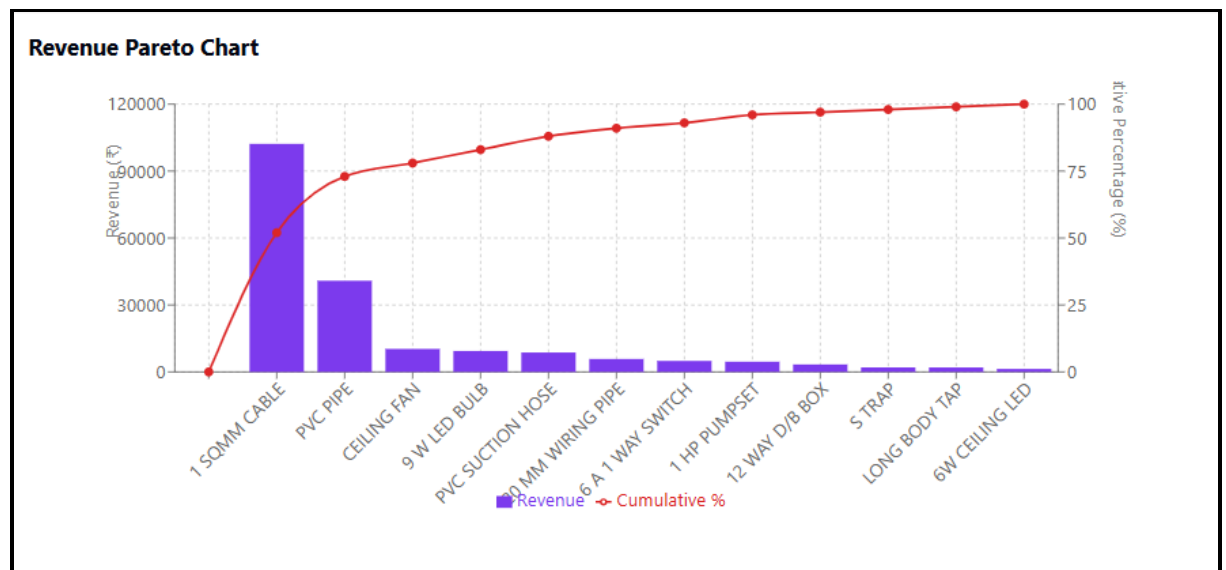


Chart 3: Revenue Pareto

3.5 Sales and Purchase Correlation

Using the CORREL function in Excel, the correlation coefficient was calculated as 0.995981561, indicating a strong positive correlation between sales and purchases. This means that as sales increase, purchases also increase. This correlation holds true for the total purchases and sales across each item, demonstrating that the purchasing decisions are well-aligned with sales trends.

The following table has been created with sales and purchase data for analysis. This table provides insights into the relationship between the sales and purchase volumes across different products.

ITEM	SALES	PURCHASE
6W CEILING LED	7949.17	0
S TRAP	12076.21	10353.48
CEILING FAN	61821.97	45087
12 WAY D/B BOX	20057.74	14206.41
1 HP PUMPSET	27457.62	0
PVC SUCTION HOSE	52197.6	47478
LONG BODY TAP	11974.64	3718
6 A 1 WAY SWITCH	29597.28	30240
1 SQMM CABLE	613178.61	543037.2
9 W LED BULB	56290.94	41054.84
PVC PIPE	245197.7	170705
20 MM WIRING PIPE	34839.73	22880

Table 6: Sales and Purchase

A scatter plot has been drawn using the values of sales and purchases. This visual representation helps illustrate the strong positive correlation between the two variables, confirming that as sales increase, purchases also rise. The scatter plot provides a clearer understanding of how closely aligned sales and purchases are across different products.

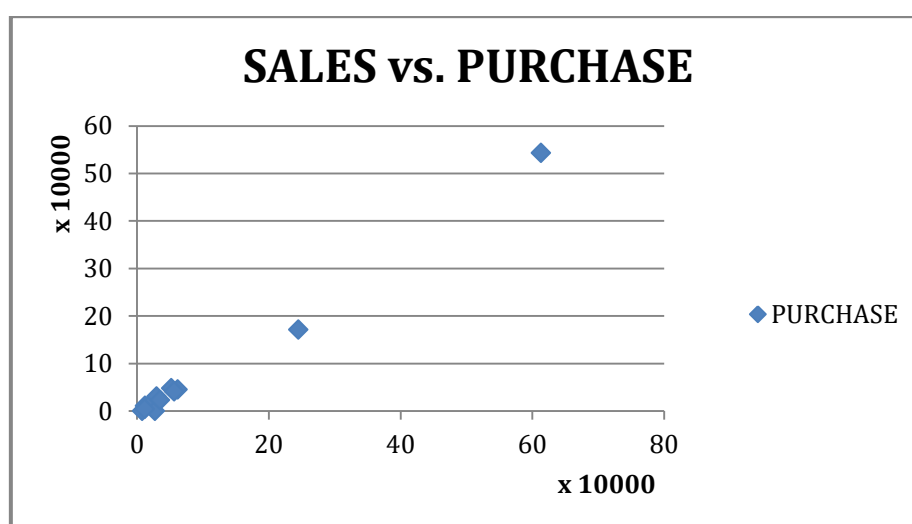


Chart 4: Scatter Plot between Sales and Purchases

The insights from the scatter plot reveal that PVC Pipe and 1 SQMM Cable are the two outliers. Outliers in scatter plots are data points that deviate significantly from the overall trend or pattern, and identifying them is important as they may provide valuable insights or indicate potential issues in the dataset.

In this case, these outliers appear to be High Sales Outliers, representing products with unexpectedly high sales. This can be confirmed by the highlighted sales values for these items, which stand out compared to the overall trend of other products.

4. Interpretation of Results and Recommendation

Based on the analysis of the data, the following recommendations are provided to increase sales, optimize inventory, and improve market position:

Recommendation 1: Improve Product Visibility

To enhance product visibility and drive sales, several strategies are recommended. First, position low-selling items in high-visibility areas to attract customer attention and encourage inquiries, potentially boosting sales. Additionally, use digital promotion through social media ads and online platforms to highlight slow-moving products and generate interest. Updating business cards with an appealing design and including information about various product categories can further enhance brand recognition. Regularly rearranging product displays will keep the store layout dynamic, helping customers discover the full range of available items. Lastly, providing brochures, notices, or models of different brands will educate customers about the product offerings, fostering informed purchasing decisions.

Recommendation 2: Collaborate with Suppliers

Strengthening collaboration with suppliers can bring multiple benefits. Begin by requesting support for co-marketing initiatives and negotiating extended payment terms for frequent customers, including flexible options like "pay later" or EMI for high-value products, which can enhance customer loyalty. Additionally, offering free and speedy repair services for items within the warranty period will build customer trust and satisfaction, encouraging repeat purchases. Lastly, negotiate return or exchange agreements for unsold stock with suppliers to effectively manage excess inventory, reducing financial strain and optimizing stock levels.

Recommendation 3: Strengthen Marketing and Branding

To enhance marketing efforts and build a strong brand presence, several strategies should be implemented. First, leverage digital marketing by actively promoting products on platforms like Facebook, Instagram, Twitter, etc. to reach a broader audience. Participating in public events, such as local trade fairs, community festivals, and industry exhibitions, can further

boost visibility and create opportunities for direct customer engagement. Building a strong, recognizable brand that resonates with the target audience is essential for long-term success. Additionally, highlight positive customer reviews and testimonials on social media, websites, and advertisements to build trust and credibility. Running flash sales or special offers will create urgency and encourage quick purchases, driving short-term sales growth.

Recommendation 4: Evaluate Product Pricing

To ensure competitive and profitable pricing, several strategies should be employed. First, optimize pricing for each product by balancing customer expectations with profitability, avoiding prices that are too low or too high. Regularly compare prices with competitors to maintain a competitive edge. Additionally, establish tiered pricing by offering products at different price points based on features or benefits, which can attract a broader range of customers. Running targeted promotions, such as seasonal sales, loyalty discounts, and other special offers, can help attract price-sensitive customers and boost sales during key periods.

Recommendation 5: Implement Inventory Categorization

To improve inventory management, it is essential to implement a categorization strategy. Focus on Category A and B products, which are high- and moderate-demand items, by monitoring their stock levels frequently to prevent stock outs. For Category C items with low demand, consider reducing stock or introducing more variety, such as different brands or colours, to boost their appeal and sales. Implement FIFO (First In, First Out) practices to minimize wastage, particularly for products with expiration dates. Maintain buffer stock for high-demand items to ensure availability and prevent stock outs. Additionally, offer discounts, bundle offers, or run clearance sales to manage excess inventory and encourage the sale of slow-moving products.

Recommendation 6: Enhance Customer Experience

Improving customer experience is crucial for building loyalty and driving sales. Start by providing excellent customer service, ensuring prompt resolution of inquiries and complaints to build trust. Simplify the buying process, both online and in-store, to make purchasing seamless and hassle-free. Ensure consistency across all channels, including physical stores, websites, and mobile apps, to deliver a cohesive customer experience. Introduce rewards programs to incentivize repeat purchases and foster customer loyalty. Experiment with new

features, such as innovative packaging, delivery options, or product enhancements, to attract customer interest. Encourage bulk buying by offering discounts for larger purchases, promoting higher sales volumes. Lastly, actively collect customer feedback to understand reasons behind low product sales and make necessary improvements based on their insights.

Recommendation 7: Understand Market Demand

To better meet customer needs and drive sales, it's essential to understand market demand. Begin by analyzing market trends to identify products that perform well during specific seasons, such as summer in Kerala and the festival season. During peak seasons like festivals, increase the range of popular products and offer additional options, such as different brands or colors, to cater to customer preferences. Align product offerings with customer demographics, considering factors like age, gender, income, and personal preferences (e.g., aesthetics, functionality, and brand loyalty). Tailor your product selection to match these insights. Additionally, segment the market by analyzing customer behavior to cater to diverse customer groups and their specific preferences, ensuring that products are relevant to each segment.

Recommendation 8: Train the Staff

Investing in staff training is a key to enhancing customer experience and improving operational efficiency. Ensure that sales staffs have in-depth product knowledge, enabling them to effectively explain the features and benefits of low-selling items to customers. Equip staff with strategies to cross-sell low-selling products alongside popular items, boosting their sales. Train staff in efficient inventory management, using both software (e.g., Tally) and manual methods, to maintain inventory accuracy and prevent stock discrepancies. Additionally, ensure staff are fully trained in the technologies and software used by the business to minimize errors and enhance inventory management practices. This comprehensive training will empower staff to contribute to both customer satisfaction and business success.

By implementing these strategies, the business can enhance sales, optimize inventory, strengthen its brand presence, and improve customer satisfaction, leading to sustained growth in the market.