BDM PROJECT

INVENTORY MANAGEMENT OPTIMIZATION AND PROFIT MAXIMIZATION FOR PRAMOD TRADERS

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PRAMOD TRADERS

- A B2C hardware retail shop serving contractors, builders, plumbers, homeowners.
- Has a strong customer base and is focusing on acquiring new customers.
- Product Categories: Electrical, Sanitary, Hardware tools, PVC products.
- Reputation: Known for quality products and services, establishing customer trust.
- Is run by the owner and has one employee for help.

PROBLEMS TO SOLVE

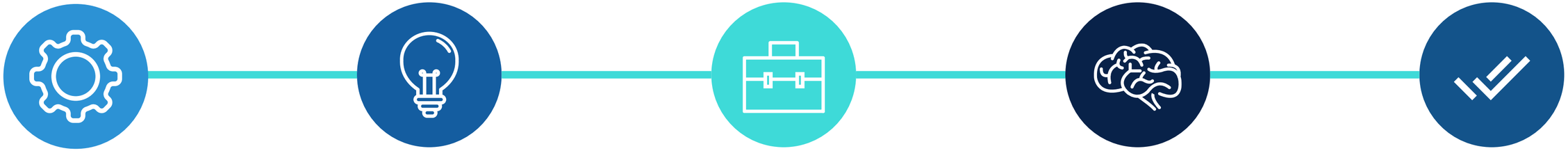
01 **Acquiring New Customers for Growth**
To diversify the customer portfolio.

02 **Frequent stockouts leading to lost customers**
To improve Customer retention and reduce stockout costs.

03 **Identification of best-selling and profitable products**
For Revenue growth and sales performance enhancement.

04 **Resolving Errors in Inventory Data Management**
To enhance Data accuracy for Inventory Efficiency.

DATA ANALYSIS PROCESS



Data Collection

- Tally ERP data collection.
- Inventory Data
- Daily Sales Data
- From: April-22 to January-23

Data Cleaning

- Removing empty and repeating data.
- Adjusting for loose products
- Taking 620 products (Out of 1000)

Analysis

- Done using MS Excel
- Pivot Table Analysis
- Using VLOOKUP function

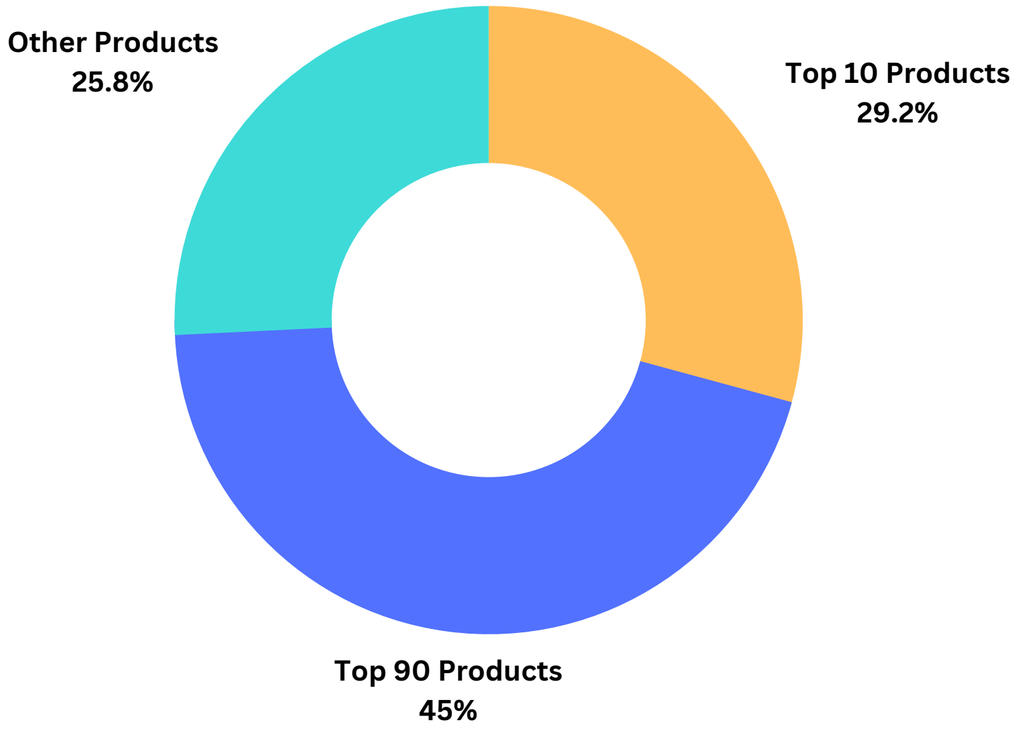
Final Analysis

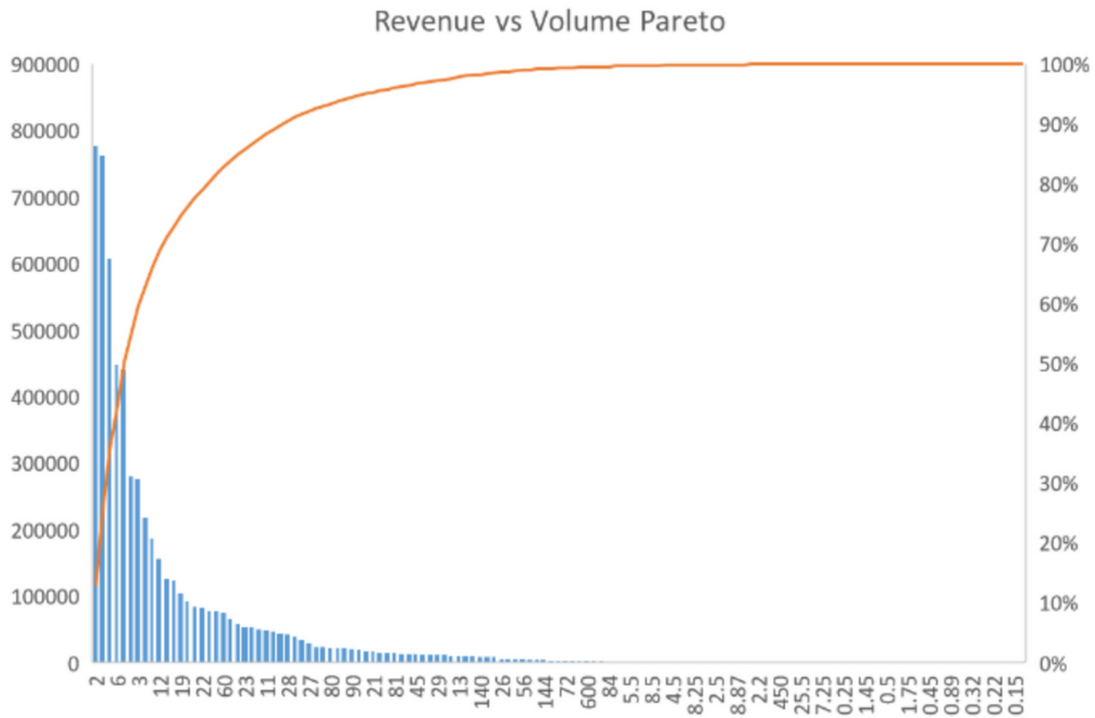
- Volume Analysis
- Weekly Sales Analysis
- Monthly Sales Analysis
- Category/Item Analysis

Results

- Understanding graphs and trends.
- Providing suggestions for enhancement.

MOVEMENT ANALYSIS

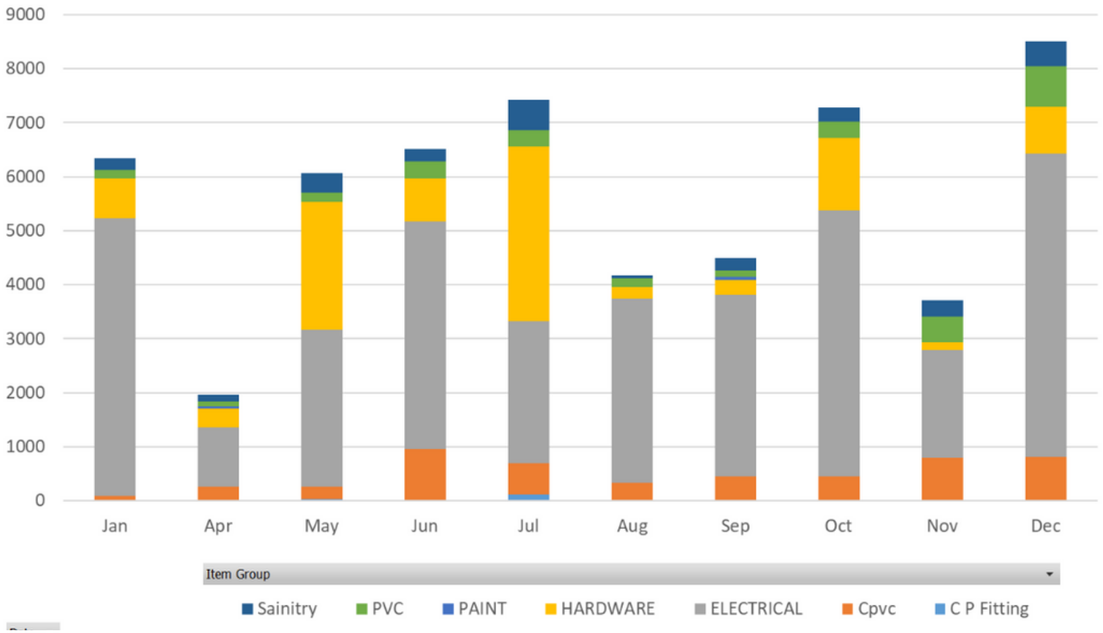




- Product movement follows a strong pareto distribution.
- 75% of volume is determined by 15% of products.
- Top 10 products contribute to 30% of Sales Volume.
- Most of which is contributed by Electrical products.

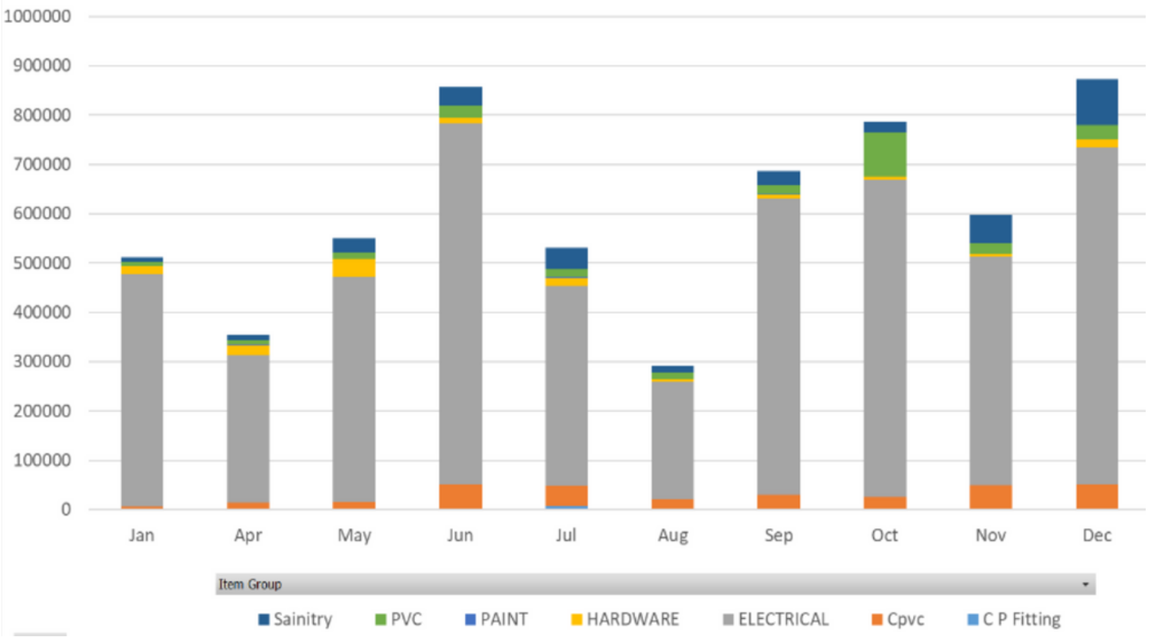
MONTHLY ANALYSIS

Units Sold



- July and May has highest Hardware sales.
- June, July, October, December and January had the highest Electrical sales.
- This shows a correlation with building stages of house.

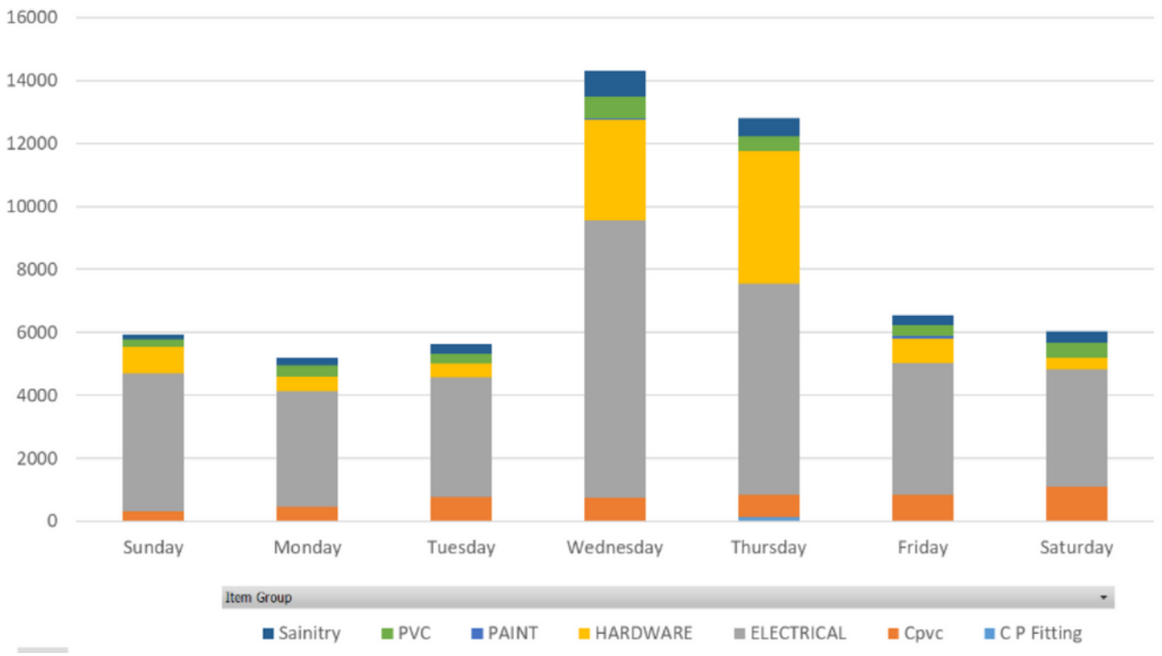
Revenue Generated



- Electrical goods are the most revenue generating products.
- June, September to December are high revenue period.
- April is the least business friendly month.

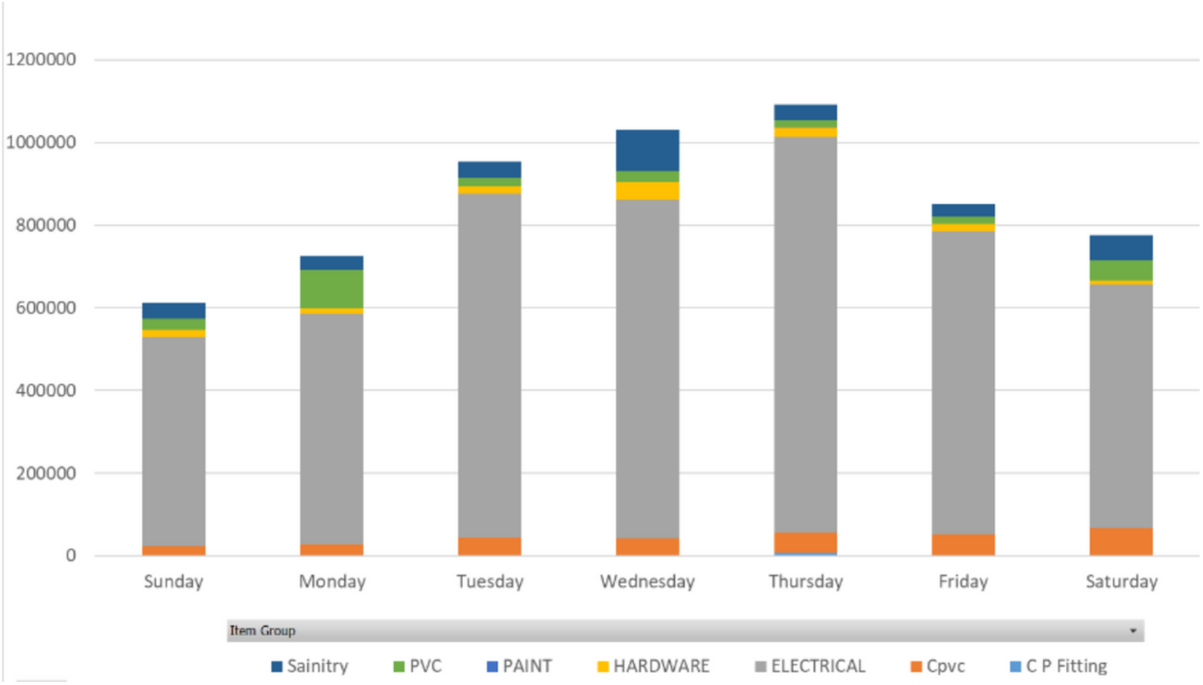
WEEKLY ANALYSIS

Units Sold



- Most customers are Mid-Week buyer/payers.
- Both Hardware and Electrical products are in heavy demand on Wednesday and Thursday.
- Restocking period can be scheduled with this.

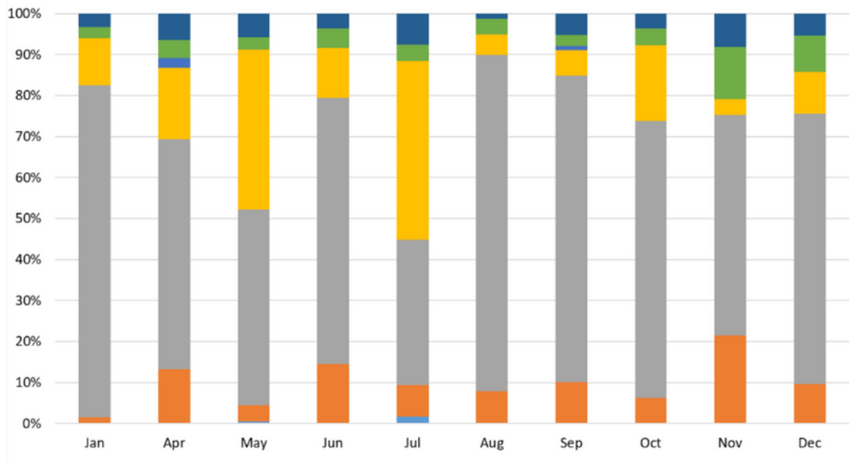
Revenue Generated



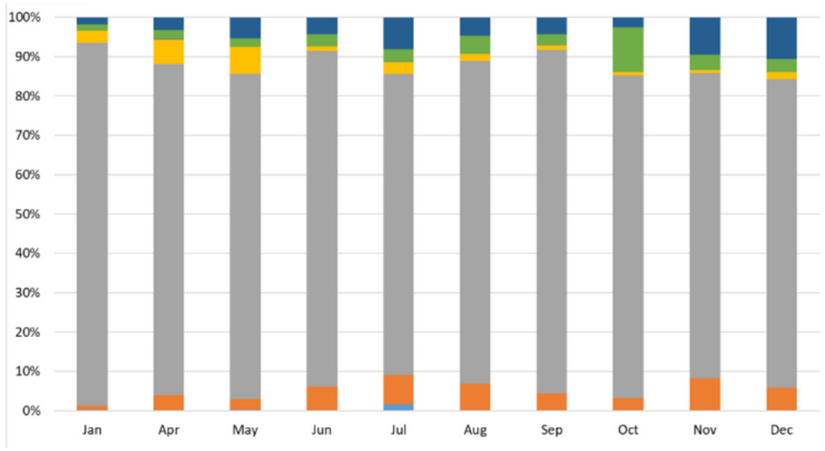
- Weekly Revenue follow a Normal distribution.
- Sunday has decent movement but less revenue.

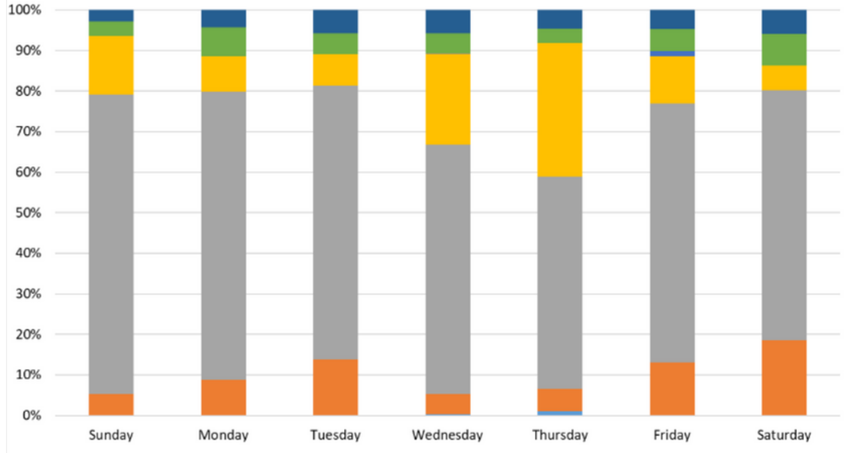
CATEGORY ANALYSIS

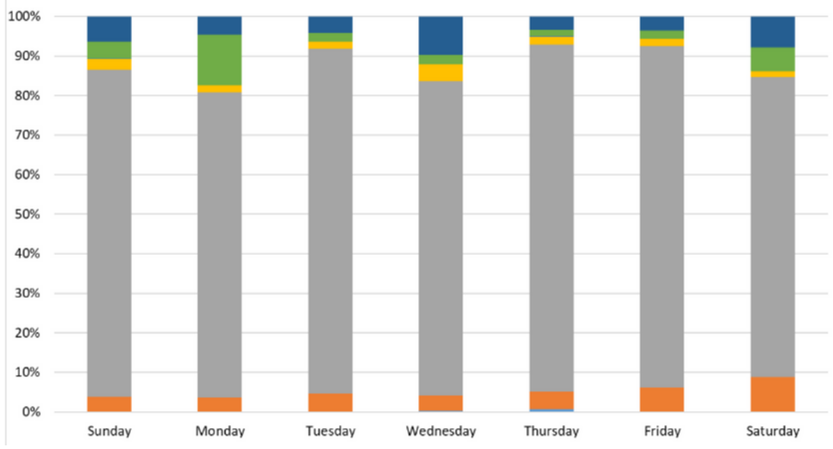
Units Sold



Revenue Generated







Sainitry PVC PAINT HARDWARE ELECTRICAL Cpvc C P Fitting

- Electrical goods dominate the product categories
- Monday, Tuesday and Saturday have high PVC/Cpvc sales.
- Hardware products are in heavy demand on Wednesday and Thursday. As well as in months of May, July and October.
- Category of product sold also have a relation with the building period of houses.

SWOT ANALYSIS

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Strengths

- Reputation for Quality
- Specialization in Categories
- Location Advantage: Located on highway
- Owners direct involvement ensures hands-on management and decision-making.

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Weaknesses

- The business faces issues related to inventory management.
- With only one employee, the business might struggle to manage the store efficiently during peak hours.

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Opportunities

- Implementing better inventory management strategies based on data analysis.
- Utilizing high-revenue days like Wednesdays and Thursdays for promotions can attract more customers.

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Threats

- The hardware retail sector can be competitive, with other stores for the same customer base with similar products.
- Economic fluctuations can impact purchasing behavior and sales as business is dependent on House development.

RECOMMENDATIONS

BUSINESS PLAN

- Prioritize Top Performers (Top 20%)
- Maintain Regular Inventory and **restock on Monday**
- Bundle Hardware goods with PVC products in months of **April** and **June** with Discount.
- Maintaining proper account of loosely sold product and location of customers.
- Planning according to the construction of house and stocking up accordingly.

BUSINESS PROPOSAL

- Run marketing campaigns and promotions on Wednesday and Thursday.
- Network with new builders and contractors to gain insights of new construction sites and localities.
- Advertise in developing region to attract potential customers.
- Train the employee to use MS Excel and record loose sales data.

THANK YOU