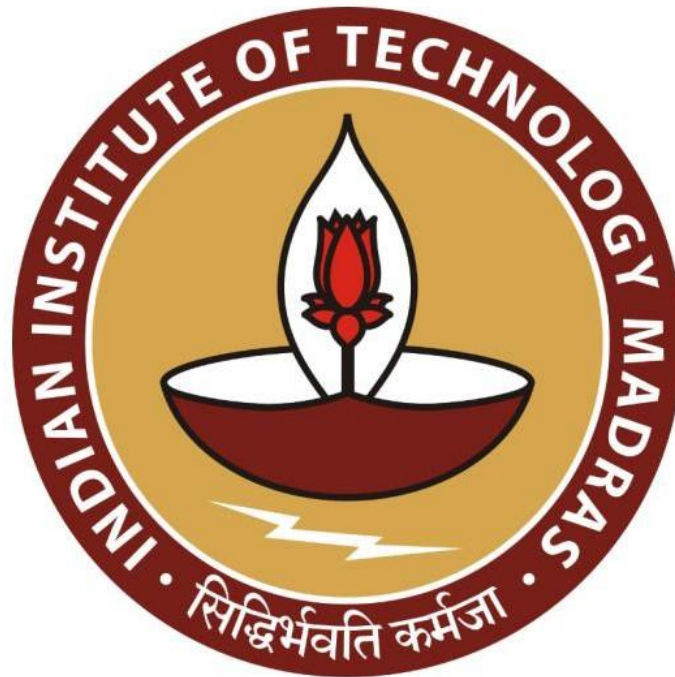# "Distributor Engagement Analysis"

A Final submission report for the BDM capstone Project

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Executive Summary

COMPANYNAMEs, headquartered in New Delhi, manufactures and distributes electrical appliances including LED TVs, fans, geysers, and induction cooktops. With a strong B2B presence across multiple states, the company is currently focusing on expanding in Kashmir. Despite offering doorstep services and financial support to distributors, it faces challenges in regional awareness, dealer onboarding, seasonal fluctuations, and policy consistency. This project aims to address these issues through data-driven insights and strategic recommendations.

The analysis was conducted using Microsoft Excel, leveraging its pivot table functionality to summarize large volumes of raw data efficiently. Sales figures, dealer interactions, and regional performance metrics were aggregated from multiple data sources and consolidated into a master spreadsheet. Key metrics such as revenue, quantity sold, month-on-month growth, and dealer performance were calculated using formulas and pivot-based summaries. Supplementary columns like Month and Weekday were derived using Excel formulas to enable time-series segmentation and trend identification.

The findings revealed a heavy reliance on a few products, with LED TVs and geysers contributing to over 85% of total revenue. January emerged as the peak sales month, while April saw a significant dip. Srinagar accounted for the highest regional sales, whereas Budgam underperformed due to minimal dealer presence. Most interactions were conducted via phone, although in-person visits were more effective in onboarding new distributors. Common barriers to sales included lack of interest and financial constraints, while pricing was a relatively minor issue.

The analysis highlights the need for strategic changes. Expanding dealer networks in low-performing regions such as Budgam could improve overall reach. Seasonal trends suggest the importance of aligning inventory and promotional campaigns with weather-driven demand. Product diversification or bundling strategies may reduce over-reliance on a few SKUs. Furthermore, the company should invest in more frequent in-person engagement to boost distributor onboarding and strengthen market presence. Data-driven planning and localized interventions will be key to improving sales performance in Kashmir.

1. Detailed process of analysis

2.1 Data Collection and Preprocessing Methods:

2.1.1 Data Collection:

The data used in this analysis was gathered over the course of three structured meetings within a week from 20-02-2025 to 27-02-2025, which were spaced out to ensure comprehensive coverage of the target subject matter. Each meeting contributed different parts of the dataset, ensuring that updates, corrections, and contextual additions were progressively captured.

Primary Format: Most of the data entries were initially stored across multiple `.xlsx` files.The price list for the products was collected in the form of a pdf file which was later used in the revenue estimation.

Supplementary Source: A physical register was used during the meetings to record key details not captured digitally including key challenges faced by the company.

2.1.2 Data Preprocessing:

Initial Review & Cleaning

The raw data had various issues due to manual entries and inconsistent formats, such as:

Mixed data types (e.g., numbers stored as text), spelling errors, misaligned columns and placeholder entries (0, Nill, or blanks) in key fields

To resolve these issues, the data entries were first manually manual reviewed against some physical records and price list to resolve ambiguities, followed by Filtering, sorting, and counting using the built in functions to identify and fix missing, duplicate, or outlier entries

Derived Data Using Basic Formulas:

To support analysis, new fields were created using simple calculations using arithmetic some build in excel function. The newly calculated field were:

- Amount = Quantity(Qty) × Price.
- Weekday = WEEKDAY(Date)
- Month = MONTH(Date)

These derived values made it easier to group, segment, and summarize the data meaningfully. Additionally, manual entry led to missing or incorrect values (like zero quantity with non-zero amount). These were addressed by recalculating missing values using formulas, reviewing and correcting implausible (0/ Nill etc) entries in key fields This improved data reliability and ensured calculated metrics were accurate.

Data Consolidation & Reporting

The revenue was estimated using the price list of the company for the sales duration.

Once cleaned and validated, all individual datasets were combined into a masterfile, **MASTERFILE.xlsx** , ready for reporting and further analysis.

2.2 Sales analysis method:

The sales analysis was conducted almost entirely using Pivot Tables in MS Excel for dynamic grouping, filtering, and summarization.

2.2.1 Area-wise performance analysis: The aim of the area-wise sales analysis was to evaluate regional performance in terms of product sales volume and revenue generation across different months. By using pivot tables in Excel, the analysis sought to identify top-performing areas, underperforming regions, and potential markets for expansion.

The following field values were assigned for the pivot table:

Rows: Area

Columns: Month

Values: Sum of Amount or Qty

The Month on Month growth was calculated in a separate table using the following formula:

= (Current_Month_Revenue - Previous_Month_Revenue)/Previous_Month_Revenue

Formatted as percentage.

2.2.2 Product Analysis: The aim of the product analysis was to evaluate the sales performance of individual products in terms of quantity sold and revenue contribution across different months. Using Excel pivot tables, the analysis helped identify high-performing products, products with seasonal demand, and those with consistently low traction. using the following field attributes:

Rows: Product

Columns: Month

Values: Sum of Qty

2.2.3 Dealer Engagement:

The aim of this analysis was to assess dealer and distributor performance across regions by examining monthly sales volumes, using quantity ordered as the key metric. Excel pivot tables were used to rank dealers based on their order quantities, helping identify top-performing partners, potential growth dealers, and underperforming ones. The outcome revealed that a few dealers consistently contributed a significant share of sales, indicating

strong engagement and demand in their areas. Conversely, underperforming dealers were often located in regions with low awareness or logistical constraints. Some dealers showed high inquiry rates but low conversion, highlighting untapped potential. These insights enable more focused dealer support, targeted training, and tailored incentive programs to improve overall network efficiency and drive performance in lagging regions,using the following attribute values for the pivot table:

> Rows: Dealer/ Distributor
>
> Columns: Month
>
> Filter: Area
>
> Values: Sum of Qty

The potential Dealers were identified as Dealers with:

- High inquiry volume but low conversion
- Areas with growing inquiries but minimal sales
- Underdeveloped dealer regions

2.3 Sales & distribution interest analysis :

The aim of this analysis was to examine customer and distributor response patterns over time by analyzing remarks, contact purpose, and interaction modes. Pivot tables were used to track how responses evolved month by month, helping to identify common objections, interest levels, and the effectiveness of sales follow-ups. To understand the evolution of the responses overtime pivot table was created as following:

> Rows: Remarks
>
> Values: Count of Contact Purpose
>
> Columns: Month
>
> Filter: Contact Purpose

- ➢ **2.3.1 Contact mode effectiveness:**The aim of this analysis was to evaluate the effectiveness of different communication modes—phone calls vs. in-person visits—in driving sales conversions and dealer onboarding. By cross-tabulating contact mode with sales outcomes, the analysis measured the conversion success rate of each method.
- ➢ **Key Metrics Summarized:**
- Revenue Contributions per category.
- Total sales per product.
- Monthy revenue generations.

- High/low performers by region and item

- Sales remarks and customer trends

- ➢ **Key Excel Formulas Used:**

  =SUM(range): Total values in a range

  =COUNT(range): Count non-blank entries in a range

  =IF(condition, value_if_true, value_if_false): Conditional logic

  =WEEKDAY(date): Returns day of week (1–7)

  =MONTH(date): Returns the month number (1–12)

  =VLOOKUP(value, table, column_index, FALSE): Lookup a value from another sheet (price list)

  =PIVOT TABLE: Used to analyze data across multiple dimensions

2. Results & findings

Due to a high number of unsuccessful interactions with dealers and distributors regarding product sales, the median and mode values for columns such as Quantity (Qty), Price, and Amount are recorded as zero. In certain instances, these non-transactional entries were excluded from the dataset to enable clearer visualization and more accurate analysis.

3.1 Revenue contribution per category:

The products are categorized as under (refer to Fig 1):

- **Geyzers:** 25 LTR GEYSER, 50 LTR GEYSER, 35 LTR GEYSER, GEYSER 25 LTR

- **TV:** LED 40''

- **Fans:** ASTAR 48'', FAN02, VENUS 48''

- **Heaters:** H. HEATERS
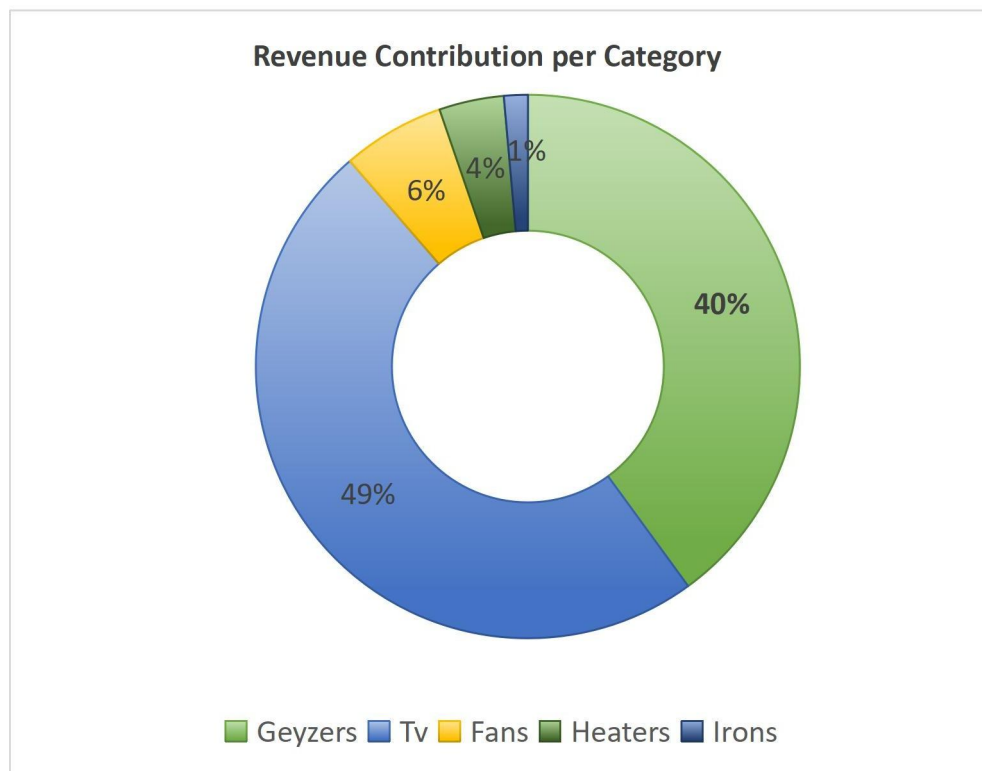
- **Irons:** IRON M-101 , IRON M-105

Figure 1-Revenue Contribution per Category

- The Geysers and TV make up for the **89%** of the total revenue generated as they are relatively high priced products with higher profit margins. The Geysers alone make up for the 40% of the total revenue contribution.There is only one TV variant **LED 40"** which has contributed **49%** of total sales. The Geyser variants and their individual contributions are: **35 LTR Geyser & 50 LTR Geyser : ~30%** ,**25 LTR Geyser: 7%** , **Geyser 25 LTR : 3%**

3.2 Sales Trends (refer to Fig 2)**:**

Peak Sales: January recorded the highest sales (**714,937.65**) , followed by a gradual decline.

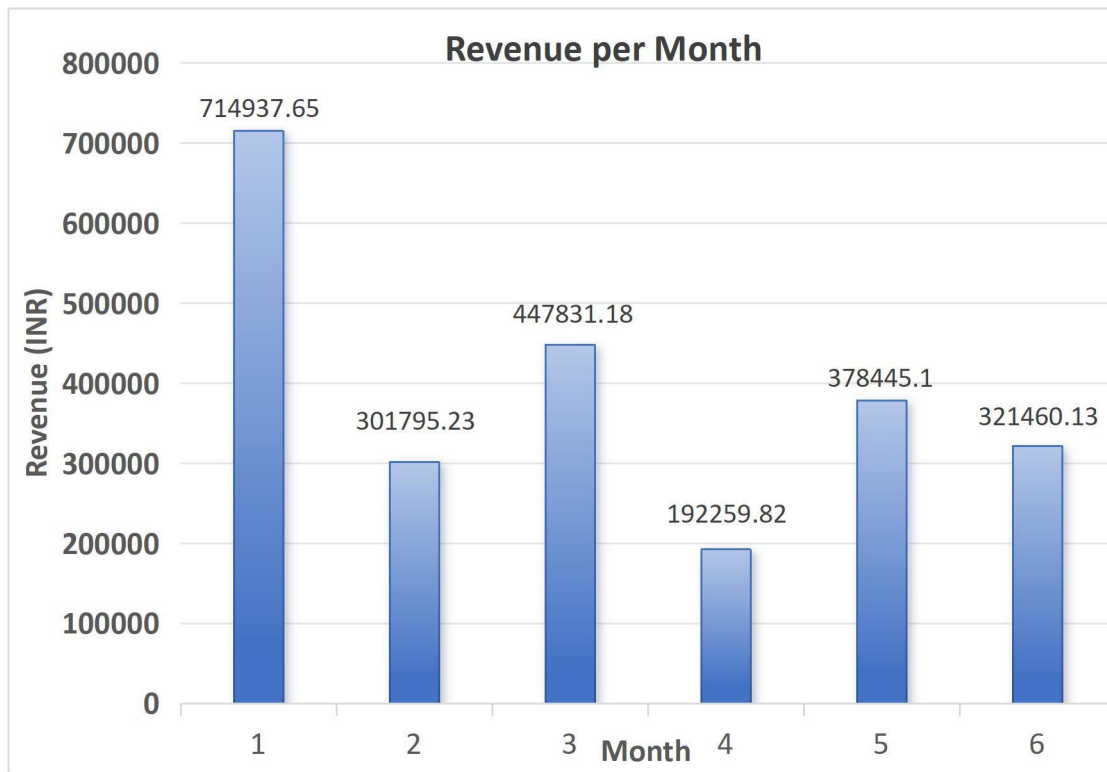**Lowest Sales:** April had the least sales **(192,259.82)**

Figure 2- Revenue per Month (INR)

Monthly Growth Rates:

- February: Decreased by 57.8%

- March: Increased by 48.4%

- April: Decreased by 57.1%

- May: Increased by 96.8%

- June: Decreased by 15.1%

January emerged as the peak sales month with an estimated revenue of Rs 714,937.65, likely driven by factors such as New Year promotional offers as well as the harsh winter in Kashmir that encouraged bulk purchases but sales saw a steady decline over the subsequent months. February experienced a sharp drop of 57.8%, likely due to seasonality shifts, extended holidays and frequent strikes, all of which may have impacted marketing effectiveness. In March, sales rebounded with a 48.4% increase, boosted by the introduction of fans and LED TVs, which significantly contributed to the month's total sales. However, this growth was not sustained, as April recorded the lowest sales at Rs 192,259.82, with a 57.1% decrease compared to March. Sales surged again in May with a 96.8% increase, before dropping once more in June by 15.1%, potentially due to seasonal factors or inventory constraints. These fluctuations highlight inconsistencies in both demand and sales strategies. Overall, the data

suggests that sales are heavily influenced by seasonal trends, with a potential uptick expected toward the end of the year.

3.3 Product Analysis

3.3.1 Top-Selling Products (refer to Fig 3):

The 40" LED television dominates the market, contributing a substantial 48.7% to the total sales. This indicates a consistently strong consumer demand for electronics throughout the year and highlights its position as a high-margin product that significantly boosts overall revenue. In contrast, geysers with capacities of 35L and 50L each hold a comparatively smaller share of around 14.6%. Their sales appear to be highly influenced by seasonal trends, particularly during the colder months, leading to a noticeable decline in demand as temperatures rise, especially by June. Meanwhile, the iron models M-101 and M-105 together account for less than 2% of total sales, stating their limited market impact. These products likely offer lower profit margins and show minimal traction among consumers, suggesting the need for either repositioning, improved marketing, or possibly reconsideration in future product line-ups.

Figure 3 - Top Products

3.3.2 Low Selling Products (refer to Fig 4):

Few products did not perform as well in terms of units sold. The IRON M-105, with just 31 units sold, contributed a modest 6.4% to the total sales. Even lower on the scale was the Geyser 25 LTR, which managed to sell only 16 units, representing a mere 3.3% share. These

low figures suggest limited consumer interest, possibly due to less favorable features, pricing, or lack of targeted marketing.
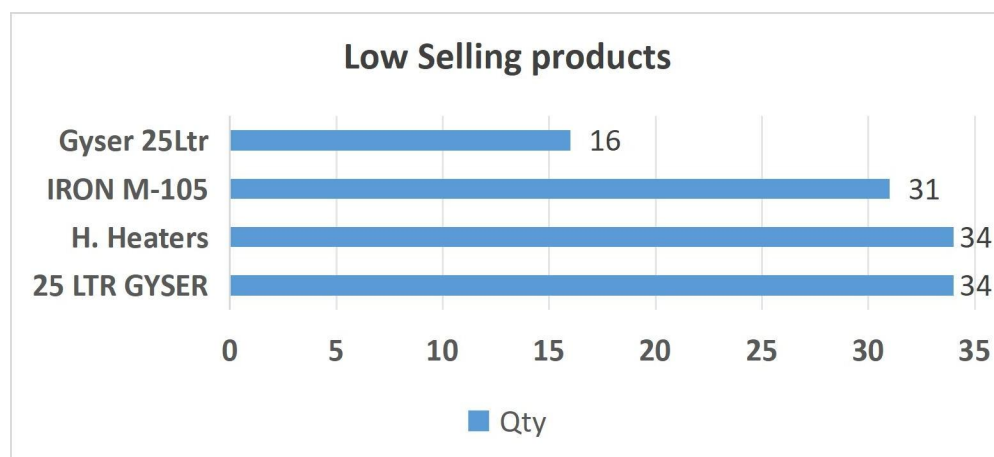

Figure 4- Low Selling Products

3.4 Product Trends Analysis (refer to Fig 5 & Fig 6)**:**

Among the top-selling products, the Venus 48" television stood out as the highest-performing item, with a total of 64 units sold, contributing 14.09% to the overall product sales. Close behind was the 35 LTR Geyser, which accounted for 55 units or 12.11% of total sales, followed by the LED 40" television,of which 52 units were sold, representing 11.45%. Although the numerical difference in units sold among these three products is not vast, their contribution to the overall sales volume and revenue is significant. The 35 LTR Geyser, in particular, played a crucial role during the peak winter months from January through March, when demand for heating appliances typically rises due to colder temperatures, especially in regions like Kashmir. The LED 40" TV, introduced in March, quickly became a consumer favorite, dominating sales in the subsequent months and indicating a strong market response to its launch. Meanwhile, the Venus 48" fan saw a steady performance throughout , recording its highest monthly sales in June, possibly due to seasonal buying patterns or mid-year promotional campaigns.
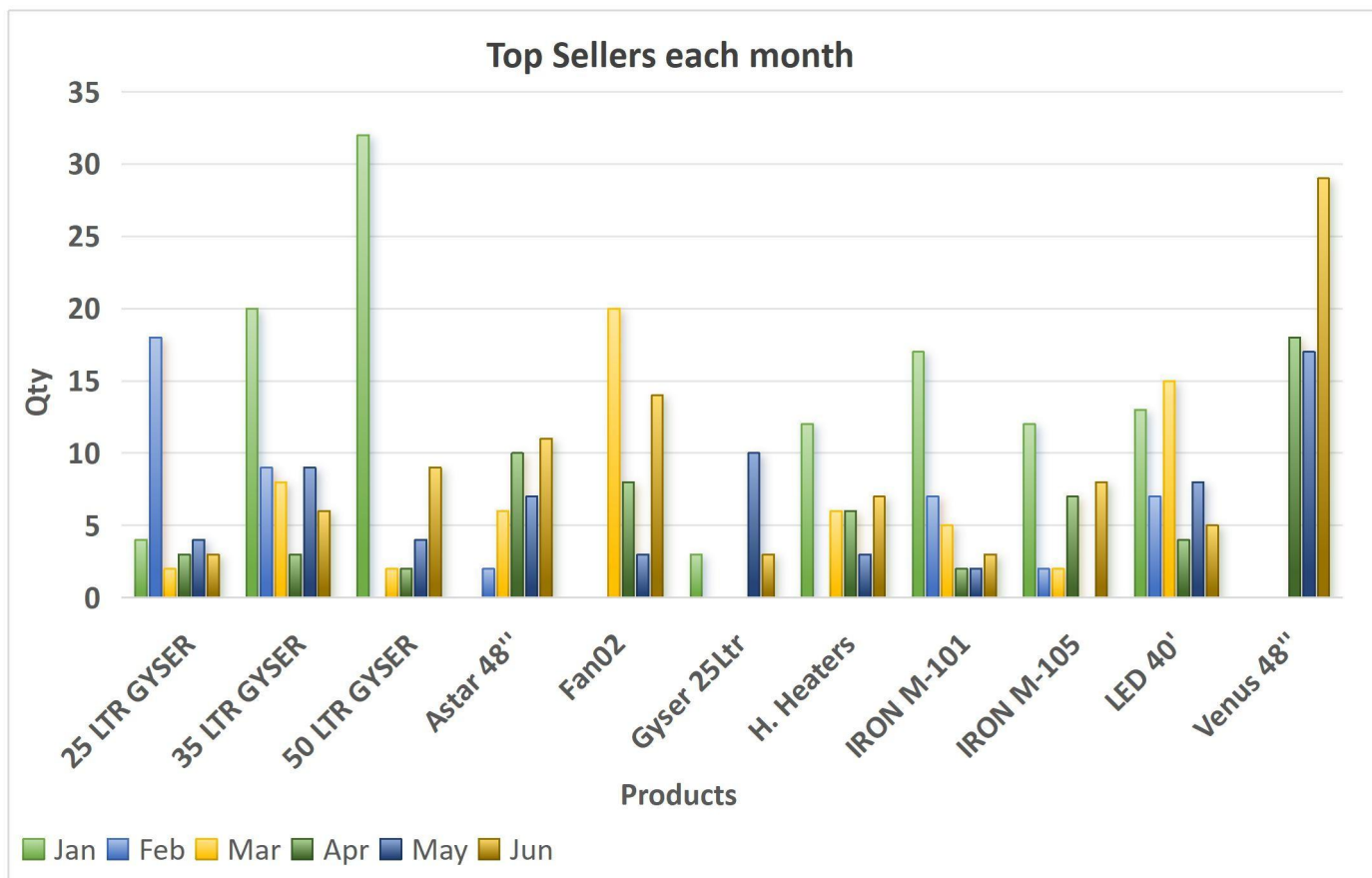
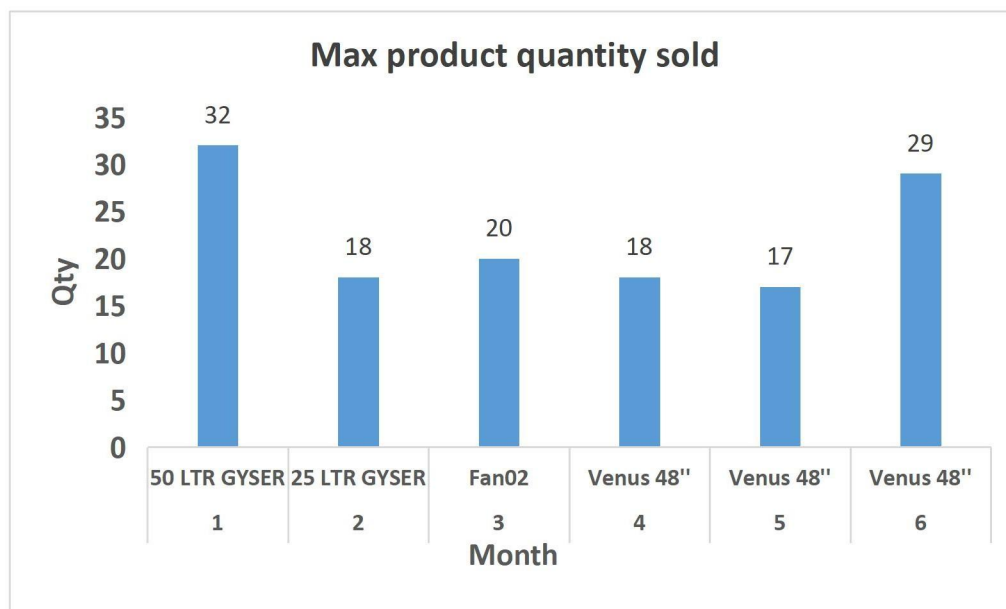*Figure 5- Top sellers each month*

Figure 6- Max product quantity sold

3.5 Area-Wise Sales Performance (refer to Fig 7)

- **Highest Sales Region: Srinagar** (1,588,652 - **62.6%**)
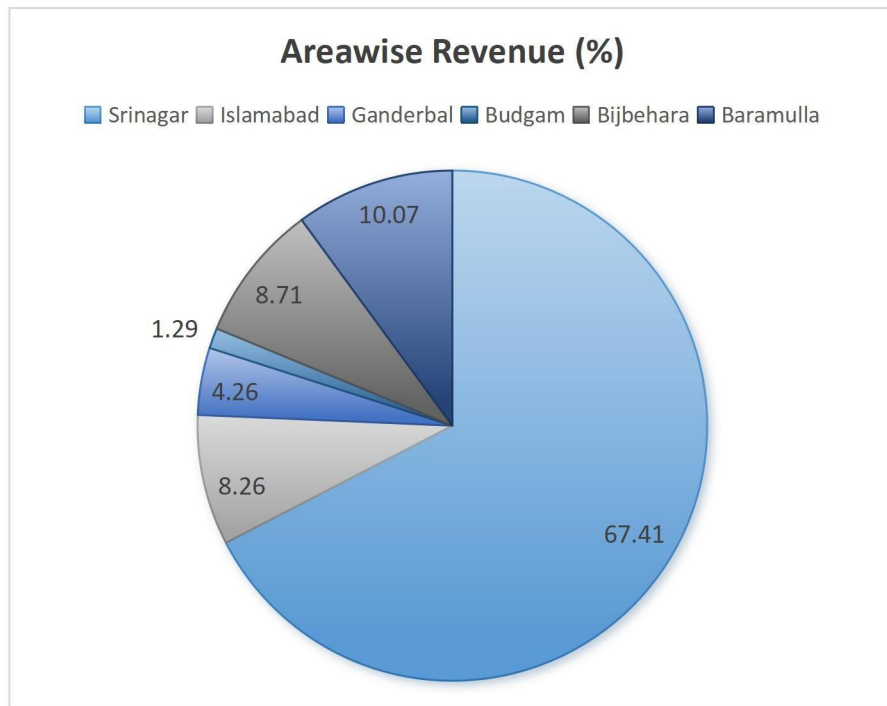- **Lowest Sales Region: Budgam** (30,410 - 2.**4%**)

Figure 7- Areawise Revenue (%)

Area	Number of Dealers	Top Dealers
Srinagar	34	Sofi Communications
		United Home Shopee
Islamabad	6	Shahanshah Electronics
Baramulla	8	Baramulla Electronics
Budgam	2	Pacific Electronics
Bijbehara	7	Jaguare
Ganderbal	7	Shine Motors

Table-1

Srinagar stands out as the highest-performing sales region, contributing a remarkable Rs 1,588,652, which accounts for 62.6% of total sales. This strong performance is supported by the presence of 34 active dealers, the highest among all regions, indicating a well-established distribution network and a large customer base. Islamabad and Bijbehara follow as the next best-performing regions, likely benefiting from a relatively higher dealer presence- 6 in Islamabad and 7 in Bijbehara- which enhances product availability and customer outreach. On the other hand, Budgam ranks as the lowest-performing region, with sales totaling only

Rs 30,410, representing a mere 2.4% of the overall sales. This under-performance is largely attributed to the region being underdeveloped in terms of dealer engagement, with only 2 dealers currently operating in the area. The minimal market penetration in Budgam suggests a potential opportunity for expansion, as increasing the number of dealers and improving market coverage could help tap into an otherwise overlooked customer segment. Overall, the sales distribution across regions appears closely tied to the number of active dealers, emphasizing the importance of strategic dealer placement in driving regional performance.

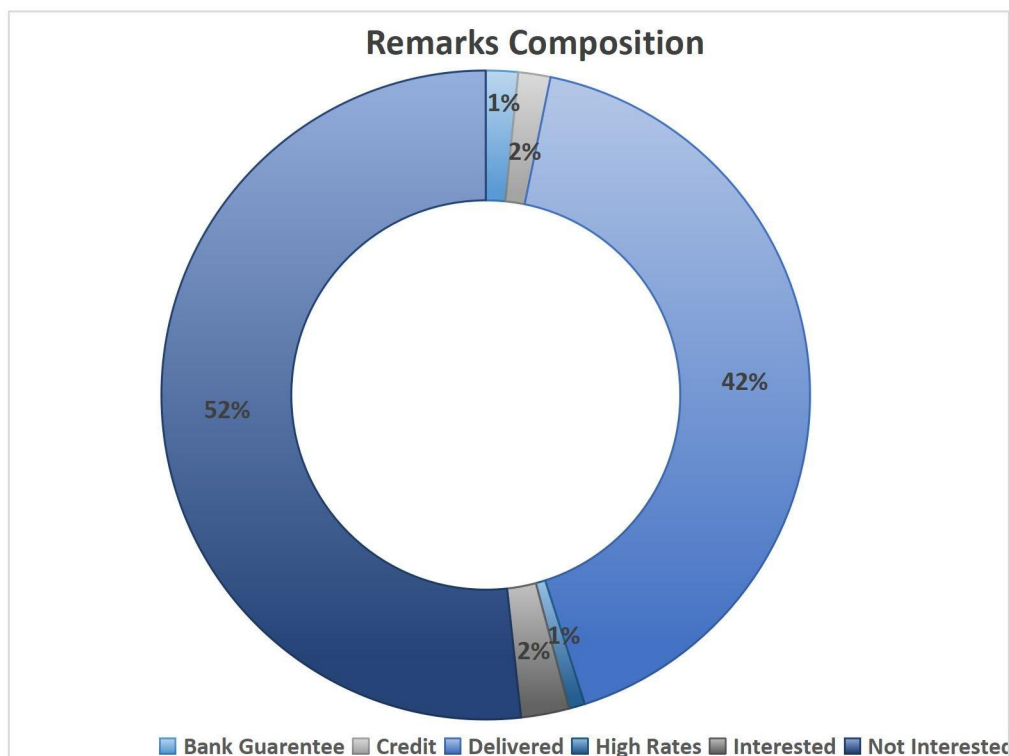**3.6 Remarks Analysis** (refer to Fig 8)**:**

Figure 8- Remarks Composition

The primary reason for lost sales is customer disinterest, with "Not Interested" being cited in 45% of the cases, highlighting a major challenge in engaging and converting potential leads. Financing-related issues, such as problems with credit and bank guarantees, were identified in 12 instances, indicating that financial constraints remain a barrier for a segment of potential buyers. High pricing was noted as a concern in only 3 cases, suggesting that price is not a major issue in most sales scenarios. Additionally, there were 5 instances where interested leads failed to convert into actual purchases, pointing to potential gaps in follow-up, customer engagement, or decision-making delays on the part of the customer. These insights suggest that improving lead nurturing strategies and addressing financial facilitation could significantly reduce lost sales and enhance overall conversion rates.

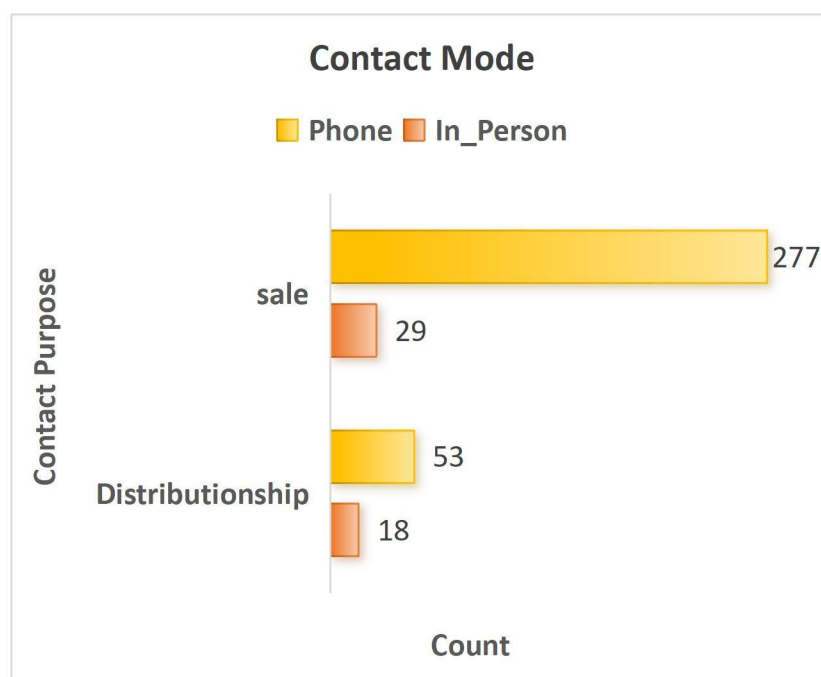**3.7 Effectiveness of Contact Mode (Phone vs. In-Person)**

Figure 9- Contact mode vs Contact purpose

Majority of the interactions have been through Phone calls while as only 12% interactions have been through In person visits. (refer to Fig 9)

Contact Mode	Sale	Distributionship
Phone	277	53
In Person	29	18

Table-2

1) Communication through Phone (refer to Fig 10)**:**

The majority of customer and dealer interactions have been conducted through phone calls, accounting for 87.2% of total engagements, while only 12.8% occurred through in-person visits. Despite a higher volume of interactions and rejections via telephone, phone communication has proven effective in maintaining engagement with existing clients and dealers, achieving a 43% success rate in message delivery and interest generation. This suggests that while phone outreach may face challenges in lead conversion, it remains an efficient tool for sustaining relationships and handling ongoing sales operations. However, its effectiveness in acquiring new dealers appears limited, potentially due to a lack of personalized engagement.
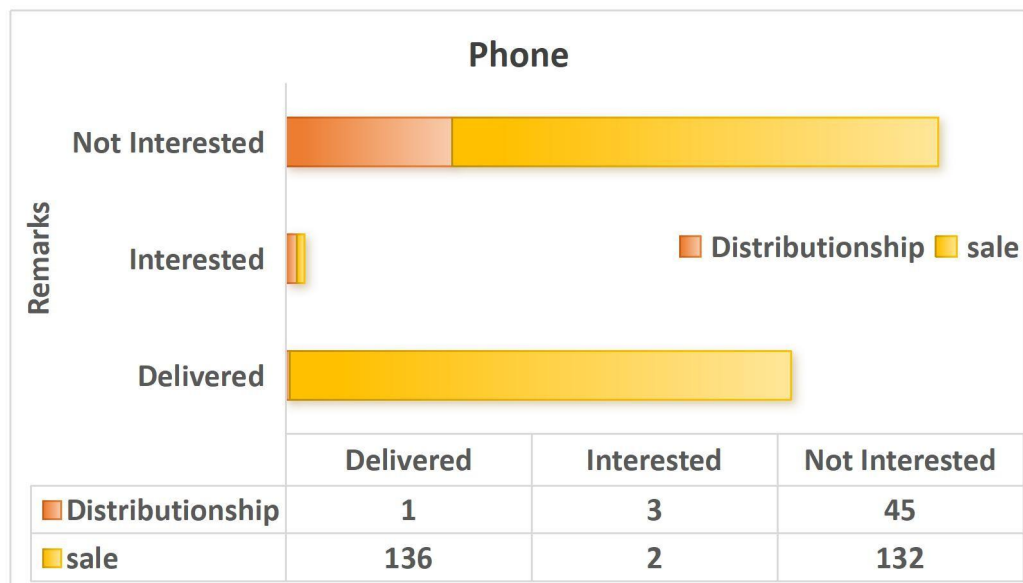
	Delivered	Interested	Not Interested
Distributionship	1	3	45
sale	136	2	132

Figure 10- Remarks obtained through Phone

2) In-Person Visits (refer to Fig 11)**:**

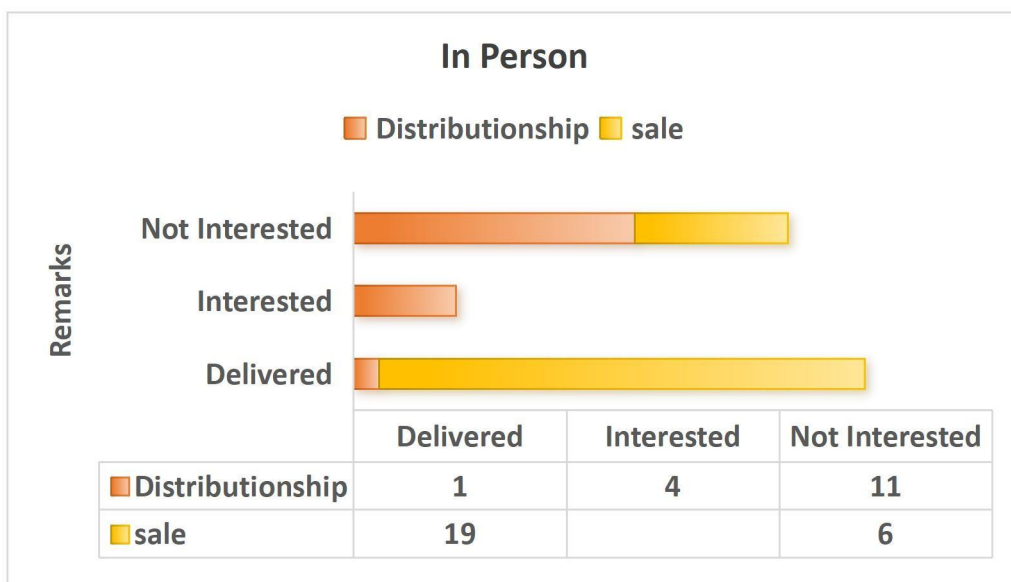|	Delivered	Interested	Not Interested
Distributionship	1	4	11
sale	19		6

Figure 11- Remarks obtained through Phone

In contrast, in-person visits, although less frequent, have demonstrated greater effectiveness in building new partnerships and distributor networks. With a 51% success rate in generating interest and fewer instances of disinterest compared to phone calls, face-to-face interactions offer a more personal touch, which resonates well with prospective dealers. This method proves particularly successful for onboarding new dealers and fostering trust, despite the logistical challenges that may limit its scalability. Overall, while telephone communication remains dominant in terms of outreach volume and is crucial for maintaining existing

relationships, in-person visits are more impactful for expanding the dealer base and should be strategically increased to support long-term growth.

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3. Interpretation & Recommendations

4.1 Revenue Dependency on Limited Products:

Interpretation:

TVs and geysers account for 89% of revenue, with the LED 40" TV alone contributing 49%. Other categories like irons, fans, and heaters contribute minimally to revenue.

Product concentration poses a risk i.e over-dependence means if these top-sellers decline, revenue drops significantly.

Recommended Actions:

1. Product Diversification:

Introduce new mid-range SKUs in underperforming categories (like compact geysers or energy-efficient fans).Launch seasonal appliances (e.g., air coolers for summer) to balance winter-heavy sales.

2. Bundle & Combo Deals:

Create packages like "Home Essentials Combo" (TV + Iron or Geyser + Fan) to push low-selling items and offer time-limited bundles during slow months.

3. Test and Retire:

Monitor sales after promotional pushes; discontinue persistently low performers to reduce overhead.

4.2 Seasonal Sales Volatility:

Interpretation:

Sales peak in January (₹714K) but drop drastically in April (₹192K).January's spike is likely due to New Year promotions and winter demand (especially geysers).

Major fluctuations highlight a lack of consistent sales strategy across seasons.

Recommended Actions:

1. Seasonal Campaign Calendar:

Pre-plan sales campaigns around regional festivals, weather shifts, and school/college seasons.

Create a calendar of seasonal SKUs: geysers in winter, fans in summer, TVs for holidays.

2. Collaborate with Local Influencers:

Partner with regional content creators or dealers to run limited-time campaigns in low-sales months.

4.3 Regional Performance Gaps

Interpretation:

Srinagar leads with 62.6% of total sales, driven by 34 active dealers,while as areas such as Budgam lags (2.4% of sales) with only 2 dealers Therefore there is a strong correlation between dealer presence and revenue performance.

Recommended Actions:

1. Dealer Recruitment Drive:

Set a target to double dealer count in low-performing areas (Budgam, Baramulla,Ganderbal). Offer dealer joining incentives, introductory discounts, and initial credit for new partners.

2. Dealer Development Program:

Monthly training workshops (online + in-person) to upskill dealers on product knowledge, customer handling, upselling.

4.4 High Lead Drop-off Due to Customer Disinterest

Interpretation:

"Not Interested" was cited in 45% of dropped leads where as financing was a minor issue (12 cases), and only 3 cases cited price as a reason, so the issue isn't affordability.

Recommended Actions:

1. Refine Lead Qualification:

Develop a simple lead scoring system to prioritize high-intent prospects and implement CRM tracking to monitor lead source, interaction history, and interest level.

2. Enhanced Follow-Up Process and reactivation campaigns:

Train sales team in consultative selling and establish a 3-step follow-up funnel: call => WhatsApp => in-person visit and send targeted offers to cold leads generating interest.

4.5 Contact Mode Effectiveness

Interpretation:

87% of contact is via phone calls which are effective for ongoing dealer relationships but weak for new acquisition as compared to in-person visits, though fewer, show realatively higher success (51%) in generating dealer interest.

Recommended Actions:

1. Hybrid Contact Strategy:

Use phone calls for follow-ups, order management, and existing dealer engagement.

Allocate field reps for in-person visits in high-potential new regions.

4.6 Top Product Strategy (TVs and Geysers)

Interpretation:

LED 40" TV is a superstar product (48.7% sales) with strong market pull post-March launch.

Geysers perform exceptionally in Jan–Mar, decline afterward.

Recommended Actions:

1. Capitalize on Star Products:

Feature TVs and geysers prominently in ads, store displays, and online listings and offer EMI/financing and festive discounts on LED TVs to boost affordability perception.

2. Extend Product Line:

Add larger screen smart TVs, smaller geysers for budget-conscious buyers.

3. Service Packages:

Offer installation + free checkups on high-value appliances to increase buyer confidence.

4.7 Poor Performance of Irons and Low-Capacity Geysers

Interpretation:

These products have minimal traction and likely low margins as IRON M-105 sold only 31 units, and 25L Geyser only 16 units..

Recommended Actions:

1. Reposition or Replace:

Rebrand irons as travel-friendly or ergonomic or replace 25L geyser with a multi-mode version (hot/cold options).

2. Push Through Combos:

Offer "Buy 1 Get 1" bundles with top-selling items or discounts on add-ons.

3. Use as Lead Magnets:

Offer them free for bulk purchases or to new dealers to generate interest in product lines.