AtliQ Mart

Promotion Analysis Report
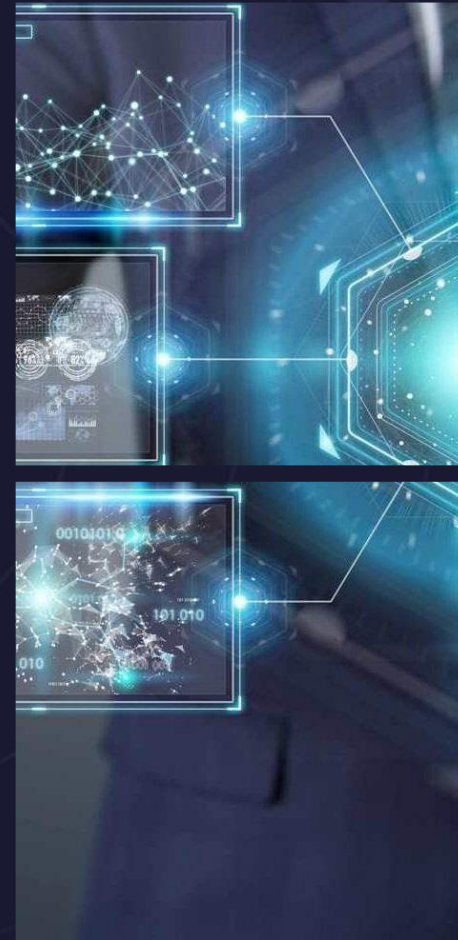
February 29th, 2024

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Introduction

AtliQ Mart is a retail giant with over 50 supermarkets in the southern region of India. All their 50 stores ran a massive promotion during the Diwali 2023 and Sankranti 2024 (festive time in India) on their AtliQ branded products. Now the sales director wants to understand which promotions did well and which did not so that they can make informed decisions for their next promotional period.

Data Source

- dim_campaigns
- dim_products
- dim_stores
- fact_events

Overview

IR	ISU
154.91M	**442K**
Rev Before **140.70M**	Sales Bef... **209K**
Rev After **295.61M**	Sales After **651K**
IR% **110.10%**	ISU% **211.28%**

IR = Incremental Revenue
ISU = Incremental Sold Units

| Store Count	Total Events	Products
50	**1.5K**	**15**

Ad-Hoc Requests

#1 High value with BOGOF offer

```sql
/*1.list of products with base_price > 500 and promo_type = 'BOGOF'*/

SELECT DISTINCT product_name, base_price, promo_type
FROM retail_events_db.dim_products
JOIN fact_events ON dim_products.product_code = fact_events.product_code
WHERE base_price > 500 AND promo_type = 'BOGOF';
```

Double Bedsheet

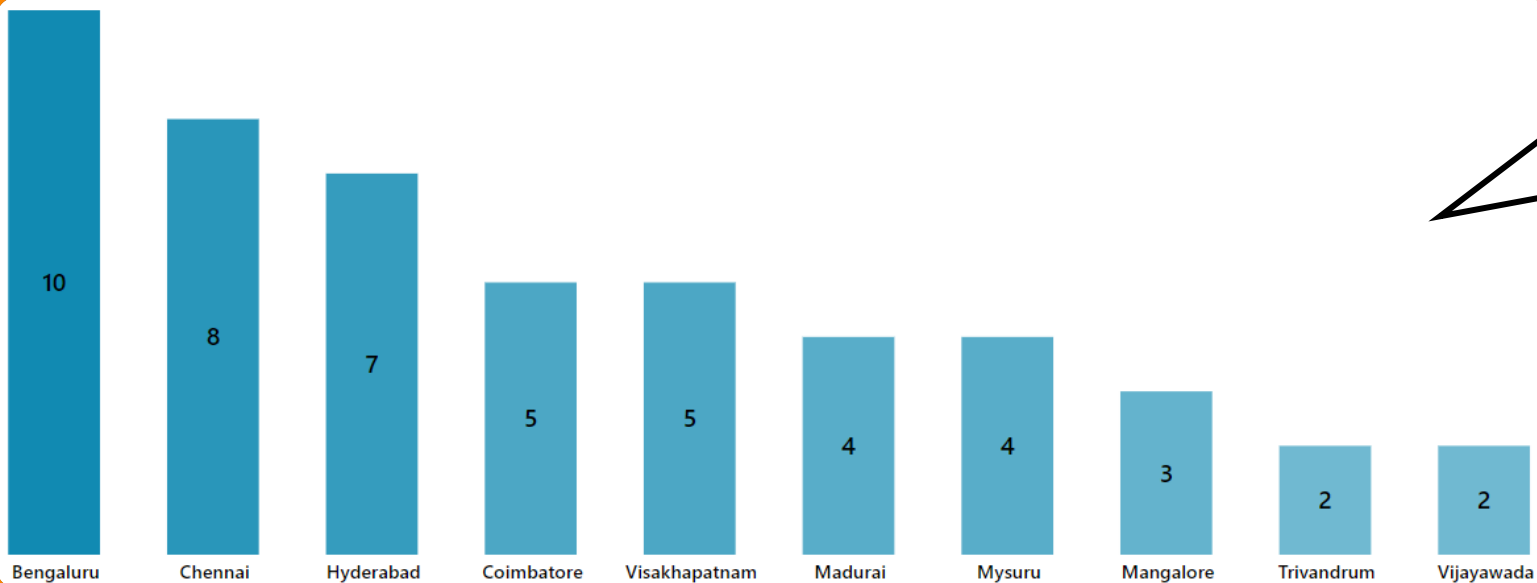Base Price : **1,190/- INR**
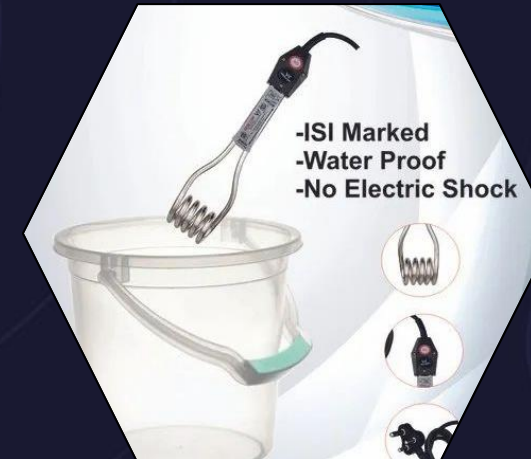
Waterproof Immersive Rod

Base Price : **1,020/- INR**

#2 Stores in Each City

#3 Revenue Before and After each Campaign

Diwali

Revenue Before
₹ 82.57 Millions

Revenue After
₹ 171.46 Millions

Sankranti

Revenue Before
₹ 58.13 Millions

Revenue After
₹ 124.15 Millions

```sql
/*3.Report showing campaign and revenue generated before and after campaign.*/
SELECT
    campaign_name,
    SUM(`quantity_sold(before_promo)` * base_price) / 1000000 AS total_revenue_before_promo,
    SUM(`quantity_sold(after_promo)` * base_price) / 1000000 AS total_revenue_after_promo
FROM dim_campaigns
JOIN fact_events ON dim_campaigns.campaign_id = fact_events.campaign_id
GROUP BY dim_campaigns.campaign_name;
```

#4 ISU% for Each Product Category During Diwali

```sql
/*4.Report that calculates Incremental Sold Quantity (ISU%) for each category during Diwali.*/

WITH DiwaliSales AS (
    SELECT
        category,
        SUM(
            (`quantity_sold(after_promo)` - `quantity_sold(before_promo)`) /
            (`quantity_sold(before_promo)`)
        ) AS isu_percentage
    FROM dim_products
    JOIN fact_events ON dim_products.product_code = fact_events.product_code
    JOIN dim_campaigns ON fact_events.campaign_id = dim_campaigns.campaign_id
    WHERE dim_campaigns.campaign_name = 'Diwali'
    GROUP BY dim_products.category
)

SELECT
    category,
    isu_percentage,
    RANK() OVER (ORDER BY isu_percentage DESC) AS rank_order
FROM DiwaliSales;
```

Home Appliances
588.45%

Home Care
203.14%

Combo 1
202.36%

Personal Care
31.06%

Grocery & Staples
18.05%

#5 Top 5 products by IR% Across all Campaign

```sql
/*5.Report featuring top 5 products ranked by IR% across all campaigns.*/

WITH IRPercentage AS (
    SELECT
        product_name,
        category,
        ((SUM(fact_events.`quantity_sold(after_promo)`)) -
SUM(fact_events.`quantity_sold(before_promo)`)) /
SUM(fact_events.`quantity_sold(before_promo)`) AS ir_percentage
    FROM dim_products
    JOIN fact_events ON dim_products.product_code = fact_events.product_code
    GROUP BY dim_products.product_name, dim_products.category
)

SELECT
    product_name,
    category,
    ir_percentage
FROM IRPercentage
ORDER BY ir_percentage DESC
LIMIT 5;
```

Immersion Rod
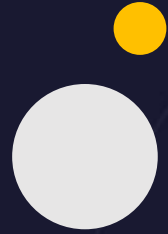**266.19%**

LED Bulb
262.98%

Double Bed Sheet
258.27%

Curtains
255.34%

Chakki Atta
160.01%

Store Performance

Store Performance

Top 10 stores by IR

Store	City	IR	IR%	ISU	ISU%
STMYS-1	Mysuru	4.92M	138.99%	12.68K	258.13%
STCHE-4	Chennai	4.83M	135.74%	12.15K	238.52%
STBLR-0	Bengaluru	4.76M	139.95%	12.45K	252.11%
STBLR-7	Bengaluru	4.72M	140.60%	12.82K	256.04%
STCHE-7	Chennai	4.65M	142.66%	12.52K	251.02%
STBLR-6	Bengaluru	4.61M	135.43%	12.41K	246.72%
STCHE-3	Chennai	4.41M	136.78%	11.72K	241.15%
STMYS-3	Mysuru	4.40M	136.59%	10.17K	223.63%
STCHE-6	Chennai	4.04M	113.11%	11.14K	218.94%
STBLR-3	Bengaluru	3.94M	117.31%	11.46K	230.33%

STORE PERFORMANCE

➢ As we can see top 10 performing stores are from 3 cities.
- Mysuru
- Chennai
- Bengaluru.

Store Performance

Bottom 10 stores by ISU

STORE PERFORMANCE

Store	City	IR	IR%	ISU	ISU%
STMLR-0	Mangalore	1.22M	74.53%	3.98K	156.80%
STVSK-3	Visakhapatnam	1.59M	69.50%	4.55K	136.36%
STVSK-4	Visakhapatnam	1.77M	73.46%	4.99K	142.35%
STTRV-1	Trivandrum	1.69M	111.26%	5.07K	213.74%
STVJD-1	Vijayawada	2.00M	111.72%	5.30K	204.55%
STTRV-0	Trivandrum	1.81M	107.32%	5.31K	215.69%
STMLR-2	Mangalore	1.89M	107.64%	5.37K	207.57%
STMLR-1	Mangalore	1.87M	113.47%	5.48K	228.09%
STVJD-0	Vijayawada	2.05M	113.76%	5.87K	217.01%
STCBE-4	Coimbatore	1.94M	76.84%	5.94K	161.82%

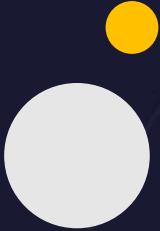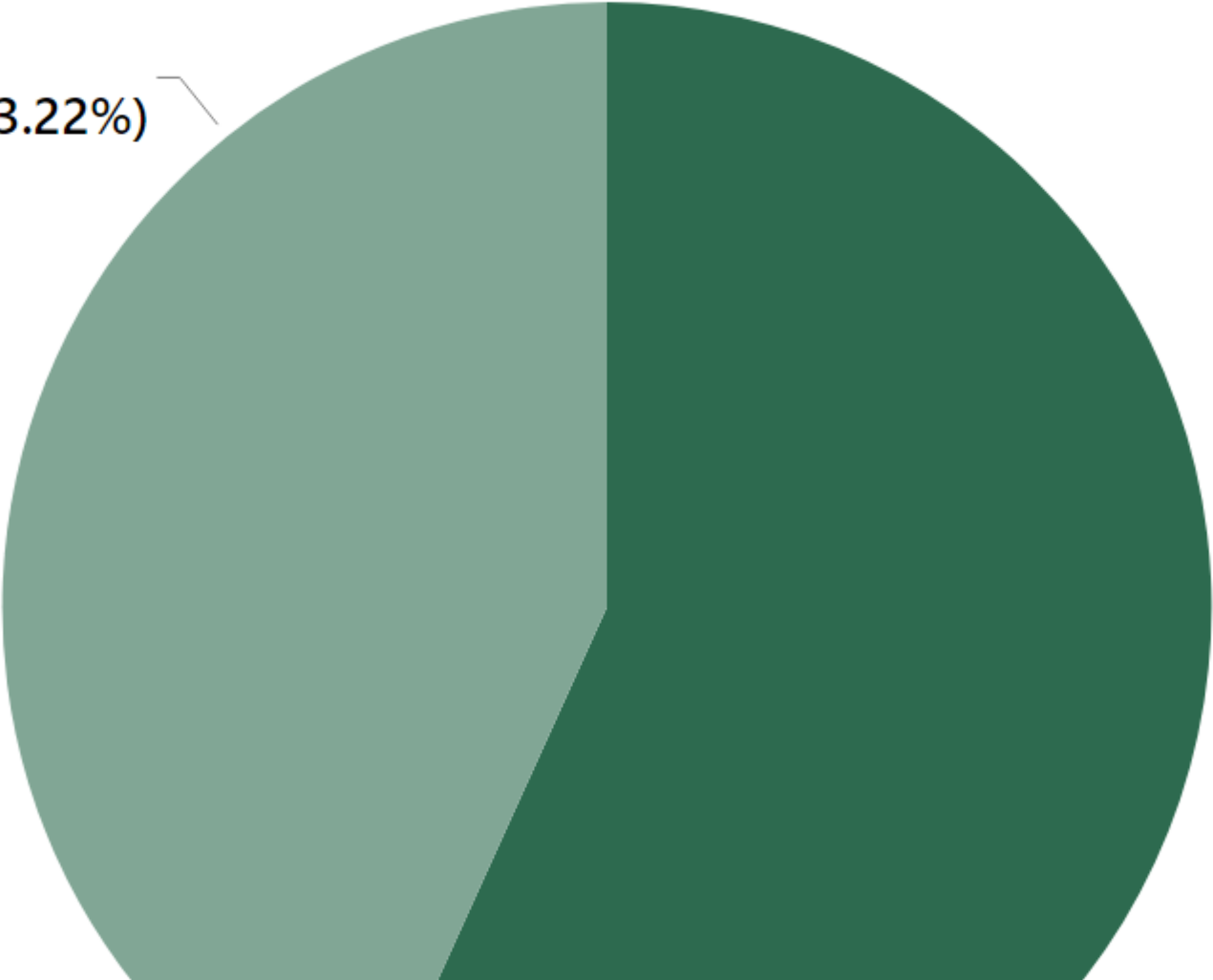| Mangalore	Trivandrum	Vijayawada
3	2	2

➢ In my analytics I found that all the stores located in Mangalore, Trivandrum and Vijayawada are in bottom performing stores.

Promotion Performance

69.32M (43.22%)

Promotion Performance

QTY REVENUE RATIO BY PROMO TYPE

Promo Type	Ratio
50% OFF	1.96%
25% OFF	0.64%
BOGOF	0.45%
33% OFF	0.26%
500 Cashback	0.04%
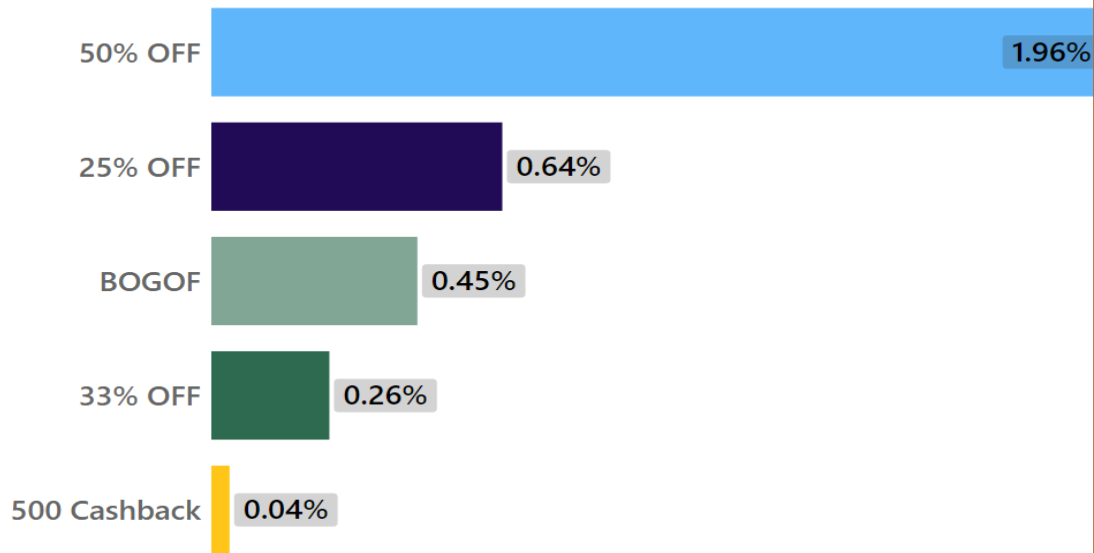
HIGHEST RATIO
25% OFF - **1.96%**

LOWEST RATIO
500 CASHBACK - **0.04%**

Higher the quantity revenue ratio better for company.
It defines balance between quantity sold and revenue generated.

Promotion Performance

| Promo Type	25% OFF		33% OFF		50% OFF		500 Cashback		BOGOF	
Category	ISU	IR	ISU	IR	ISU	IR	ISU	IR	ISU	IR
Combo1							40.88K ▲	91.05M ▲		
Home Appliances									92.51K ▲	25.15M ▲
Grocery & Staples	-3.47K ▼	-2.18M ▼	27.26K ▲	-1.56M ▼					225.86K ▲	27.73M ▲
Home Care	-1.51K ▼	-0.88M ▼							53.96K ▲	16.43M ▲
Personal Care	-0.73K ▼	-0.12M ▼			6.93K ▲	-0.73M ▼				

- I found that discount-based promotions did not perform optimally for categories such as Grocery & Staples and Home Care in terms of Incremental Revenue (IR), while BOGOF promotions demonstrated effectiveness for the same categories.

Product Performance

Product Performance

Category	Value
Grocery & Staples	249.64K
Home Appliances	92.51K
Home Care	52.44K
Combo1	40.88K
Personal Care	6.20K
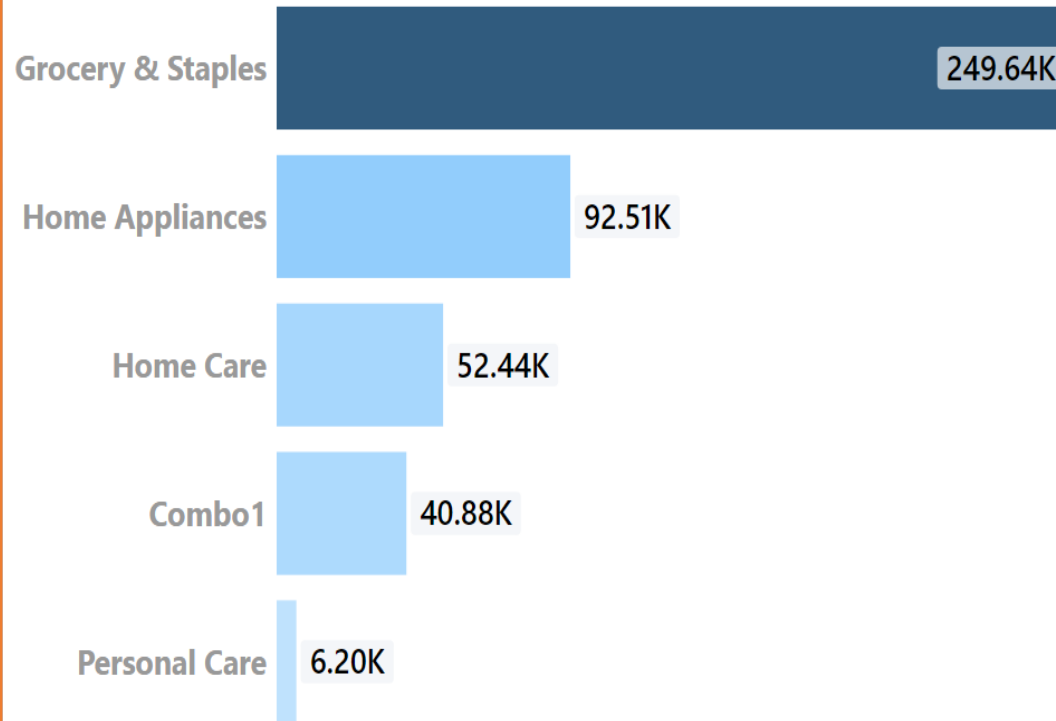
Grocery & Staples has shown significant lift in sales, while Personal Care performed poorly.

Product	Rev Before	Rev After	IR	IR%	Qty Before	Qty After	ISU	ISU%
Farm_Chakki_Atta (1KG)	10.85M	28.22M	17.36M ▲	160.01%	32.34K	150.37K	118.03K ▲	364.97%
Suflower_Oil (1L)	5.60M	13.79M	8.19M ▲	146.31%	31.31K	135.66K	104.35K ▲	333.30%
High_Glo_15W_LED_Bulb	2.89M	10.47M	7.59M ▲	262.98%	8.25K	59.86K	51.61K ▲	625.97%
waterproof_Immersion_Rod	6.60M	24.16M	17.56M ▲	266.19%	6.47K	47.37K	40.90K ▲	632.37%
Home_Essential_8_Product_Combo	66.90M	157.95M	91.05M ▲	136.11%	22.30K	63.18K	40.88K ▲	183.33%
Curtains	1.38M	4.90M	3.52M ▲	255.34%	4.59K	32.63K	28.04K ▲	610.67%
Double_Bedsheet_set	5.00M	17.92M	12.92M ▲	258.27%	4.20K	30.12K	25.91K ▲	616.54%
Sonamasuri_Rice (10KG)	32.06M	30.67M	-1.39M ▼	-4.33%	37.28K	53.24K	15.95K ▲	42.79%
Masoor_Dal (1KG)	4.48M	4.30M	-0.18M ▼	-3.92%	26.04K	37.34K	11.30K ▲	43.40%
Lime_Cool_Bathing_Bar (125GM)	0.48M	0.32M	-0.16M ▼	-33.40%	7.72K	10.28K	2.56K ▲	33.20%
Doodh_Kesar_Body_Lotion (200ML)	1.00M	0.67M	-0.33M ▼	-33.21%	5.26K	7.02K	1.77K ▲	33.57%
Cream_Beauty_Bathing_Soap (125GM)	0.39M	0.26M	-0.14M ▼	-35.00%	6.38K	7.70K	1.32K ▲	20.64%
Body_Milk_Nourishing_Lotion (120ML)	0.60M	0.39M	-0.22M ▼	-35.95%	5.95K	6.51K	0.56K ▲	9.35%
Fusion_Container_Set_of_3	2.16M	1.39M	-0.77M ▼	-35.59%	5.21K	4.47K	-0.74K ▼	-14.12%
Scrub_Sponge_For_Dishwash	0.32M	0.21M	-0.11M ▼	-35.11%	5.76K	4.99K	-0.78K ▼	-13.48%

Product that responded exceptionally well in promo (by ISU)

Product that responded exceptionally poorly in promo (by ISU)

Key Points to Focus

Campaign	Rev Before	Rev After	IR	IR%	Qty Before	Qty After	ISU	ISU%
Diwali	82. 57M	171. 46M	88. 89M	107.64%	110. 32K	217. 87K	107. 55K	97.49%
Sankranti	58. 13M	124. 15M	66. 02M	113.58%	98. 73K	432. 86K	334. 13K	338.42%
Difference	-24. 45M	-47. 31M	-22. 87M	48.33%	-11. 59K	215. 00K	226. 58K	105.39%

➢ In my analysis I found that Sankranti campaign may have achieved higher sales volume but the Diwali campaign demonstrated superior revenue optimization. ISU can capitalize on these insights to refine future campaigns and strike a balance between sales volume and revenue generation.

Conclusion

By analyzing data from previous campaigns we can apply below given suggestion to get maximum returns from next campaign.

- Mangalore, Trivandrum and Vijayawada this 3 cities need to improve their performance.

- Customers are more tend to purchase products with Cashback and BOGOF offers. We should include more products in this Promotions.

- During festivals customers are more likely to purchase Home appliances and Groceries. We can promote them more.

- There is significant difference in the performance of campaigns so it can be suggested to do some further research in order to achieve better success of campaigns in future.

THANK YOU

For watching this presentation

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click to know more about Vishal