



NAMASTE ALL

ATLIQ  
MART

# PROMOTIONAL ANALYSIS FOR SALES DIRECTOR

AN INSIGHTFUL REPORT

An Ad-hoc requests SQL Challenge led  
Insights Report conducted by CODEBASICS  
for ATLIQ MART

CREATED BY:



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# ABOUT PROJECT



ANALYSE PROMOTIONS AND PROVIDE TANGIBLE INSIGHTS TO SALES DIRECTOR

Domain: FMCG | | Function: Sales / Promotions



## OBJECTIVES

Analyze promotion performance during Diwali 2023 and Sankranti 2024 to provide actionable insights for future promotional strategies.



## DELIVERABLES

Thorough analysis of promotion effectiveness, dashboard with key metrics, SQL-based reports for ad-hoc requests, compelling presentation.



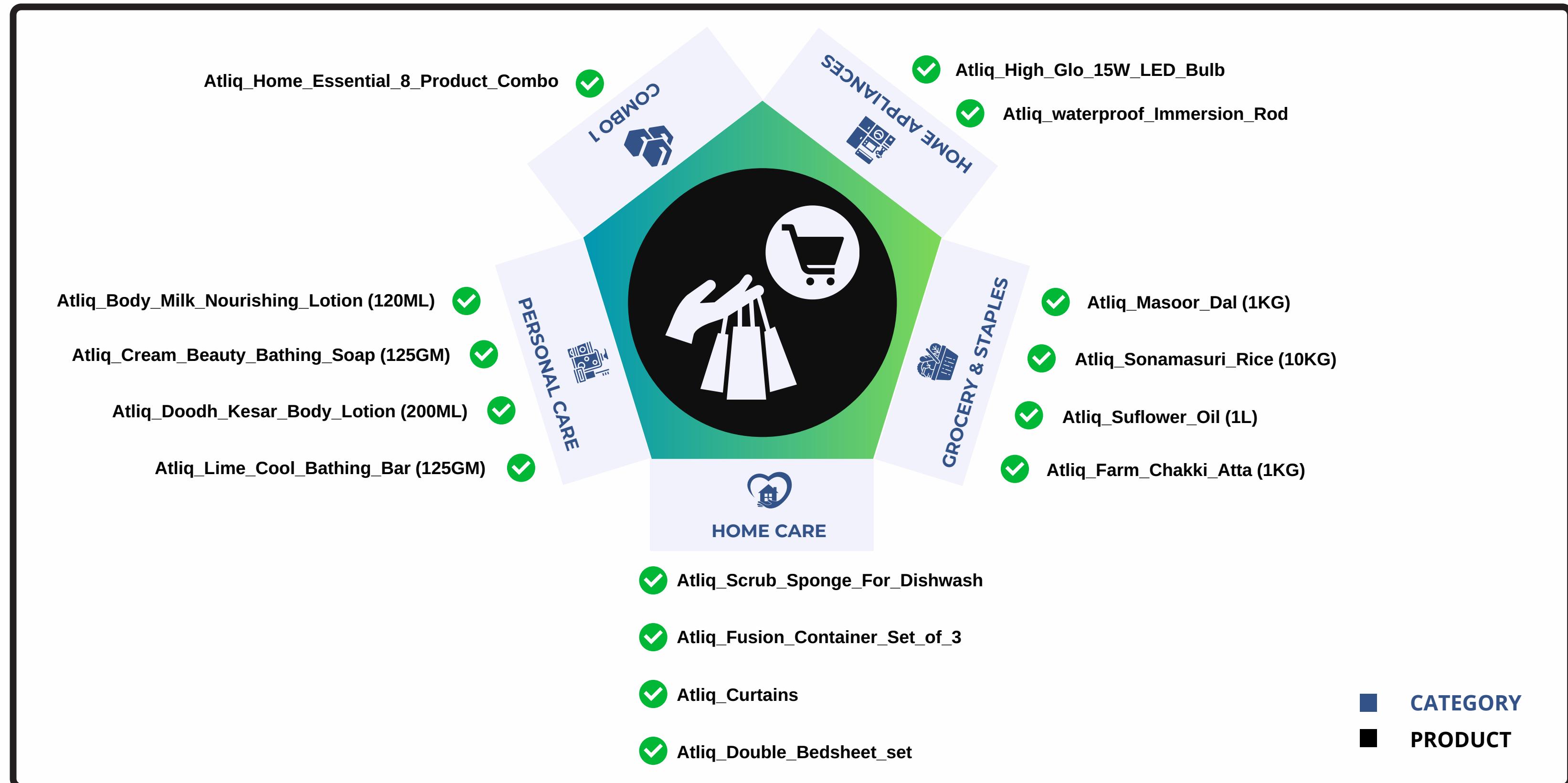
## IMPACT

Informed decisions for optimizing future promotions, increased sales, enhanced customer satisfaction, and improved profitability.

# COMPANY OVERVIEW

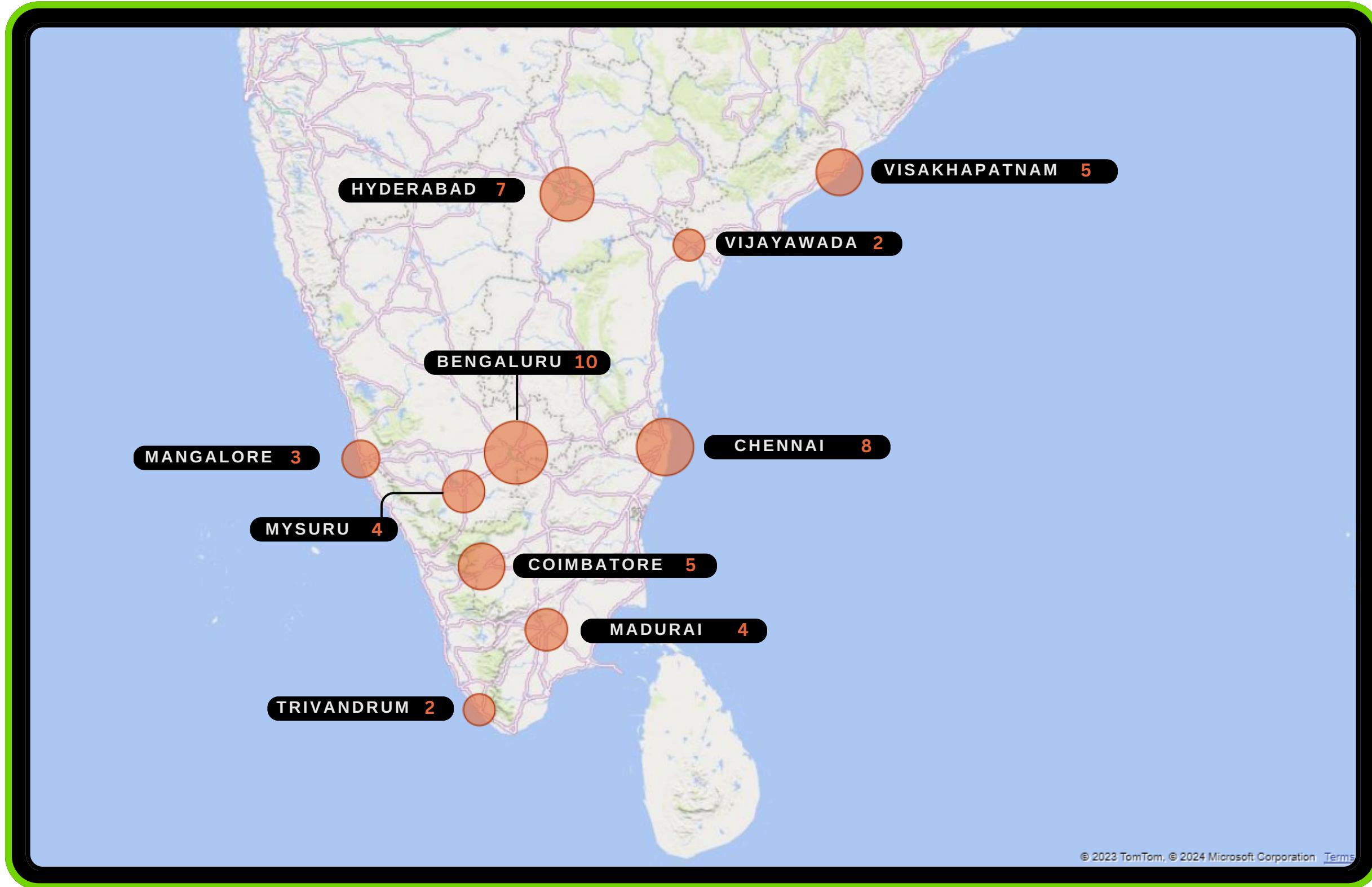
AtliQ Mart is a retail giant with over 50 supermarkets in the southern region of BHARAT(India).

Their Product lines division are as:





## ATLIQ MART RETAIL MARKET, & #STORES



### PROMOTIONS

- ✓ 25% OFF
- ✓ 33% OFF
- ✓ 50% OFF
- ✓ 500 CASHBACK
- ✓ BOGOF

### CAMPAIGNS

- ✓ DIWALI  
(12 NOV 2023 - 18 NOV 2023)
- ✓ SANKRANTI  
(10 JAN 2024 - 16 JAN 2024)

# PROJECT APPROACH



## DATA & REQUEST GATHERING



## DATA MODELLING

**ODE BASICS**

### Business Requests

**Note:**

- Start by importing the 'retail\_events\_db' database into MySQL Workbench. Craft SQL queries to address the specified business questions. Save these queries in an SQL file and upload it to GitHub. Share the GitHub link and include query outputs in your presentation.

1. Provide a list of products with a base price greater than 500 and that are featured in promo type of 'BOGOF' (Buy One Get One Free). This information will help us identify high-value products that are currently being heavily discounted, which can be useful for evaluating our pricing and promotion strategies.
2. Generate a report that provides an overview of the number of stores in each city. The results will be sorted in descending order of store counts, allowing us to identify the cities with the highest store presence. The report includes two essential fields: city and store count, which will assist in optimizing our retail operations.
3. Generate a report that displays each campaign along with the total revenue generated before and after the campaign? The report includes three key fields: campaign\_name, total\_revenue(before\_promotion), total\_revenue(after\_promotion). This report should help in evaluating the financial impact of our promotional campaigns. (Display the values in millions)
4. Produce a report that calculates the Incremental Sold Quantity (ISU%) for each category during the Diwali campaign. Additionally, provide rankings for the categories based on their ISU%. The report will include three key fields: category, isu%, and rank order. This information will assist in assessing the category-wise success and impact of the Diwali campaign on incremental sales.

**Note:** ISU% (Incremental Sold Quantity Percentage) is calculated as the percentage increase/decrease in quantity sold (after promo) compared to quantity sold (before promo)

5. Create a report featuring the Top 5 products, ranked by Incremental Revenue Percentage (IR%), across all campaigns. The report will provide essential information including product name, category, and ir%. This analysis helps identify the most successful products in terms of incremental revenue across our campaigns, assisting in product optimization.

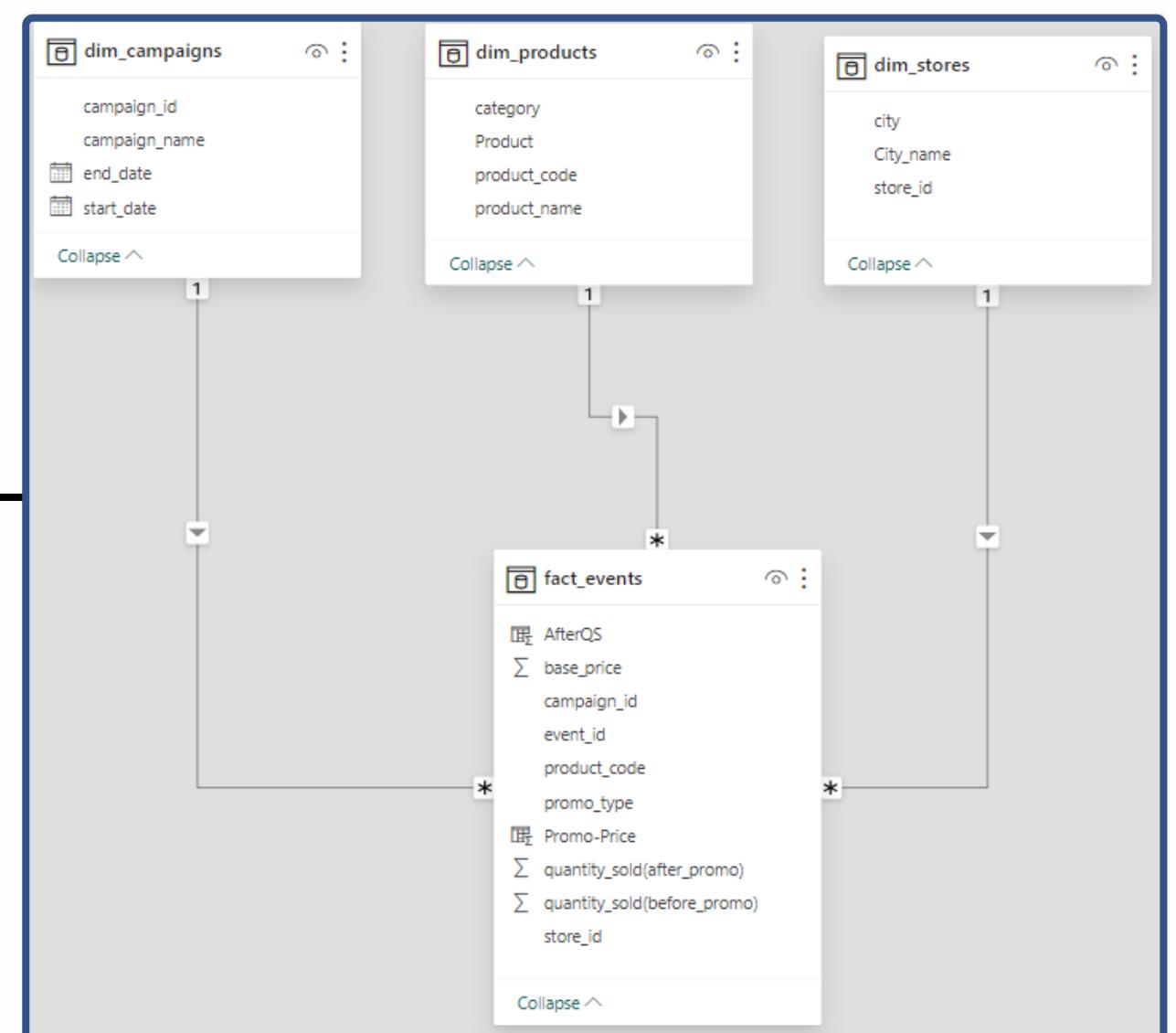
**Note:** The submissions are evaluated based on the query readability, logic, and also presentation of the results.

codebasics.io

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## ANALYSIS & VISUALIZATION



## FOR AD-HOC REQUESTS SQL ANALYSIS



## FOR DATA VISUALIZATION & INSIGHTS

Apart from the above request, “[Retail\\_Events\\_DB](#)” named Database also has been provided, and contains following Tables:

✓ dim\_campaigns  
✓ dim\_stores  
✓ dim\_products

✓ dim\_stores  
✓ fact\_events

# AD-HOC REQUEST

## DATA ANALYSIS & VISUALIZATION FOR SQL QUERIED AD-HOC REQUEST RESULTS

- Provide a list of products with a base price greater than ₹500 and that are featured in promo type of 'BOGOF' (Buy one Get One Free). This information will help us identify high-value products that are being heavily discounted, which can be useful for evaluating our pricing and promotion strategies.
- Generate a report that provides an overview of the number of stores in descending order of store counts, allowing us to identify the cities with the highest store presence. The report includes two essential fields: city and store count, which will assist in optimizing our retail operations.
- Generate a report that displays each campaign along with the total revenue generated before and after the campaign. The report includes three key fields: campaign\_name, total\_revenue(before\_promotion), and total\_revenue(after\_promotion). This report should help in evaluating the financial impact of our promotional campaigns. (Display the value in millions)
- Produce a report that includes the Incremental Sold Quantity (ISU%) for each category during the Diwali campaign. Additionally, provide rankings for the categories based on their ISU%. The report will include three key fields: category, ISU%, and rank\_order. This information will assist in assessing the category-wise success and impact of the Diwali campaign on incremental sales.
- Create a report featuring the Top 5 products, ranked by Incremental Revenue Percentage (IR%), across all campaigns. The report will provide essential information including product\_name, category, and IR%. This analysis helps identify the most successful products in terms of incremental revenue across our campaigns, assisting in product optimization.



Provide a list of products with a base price greater than ₹500 and that are featured in promo type of 'BOGOF' (Buy one Get One Free). This information will help us identify high-value products that are being heavily discounted, which can be useful for evaluating our pricing and promotion strategies.

### SQL QUERY

```

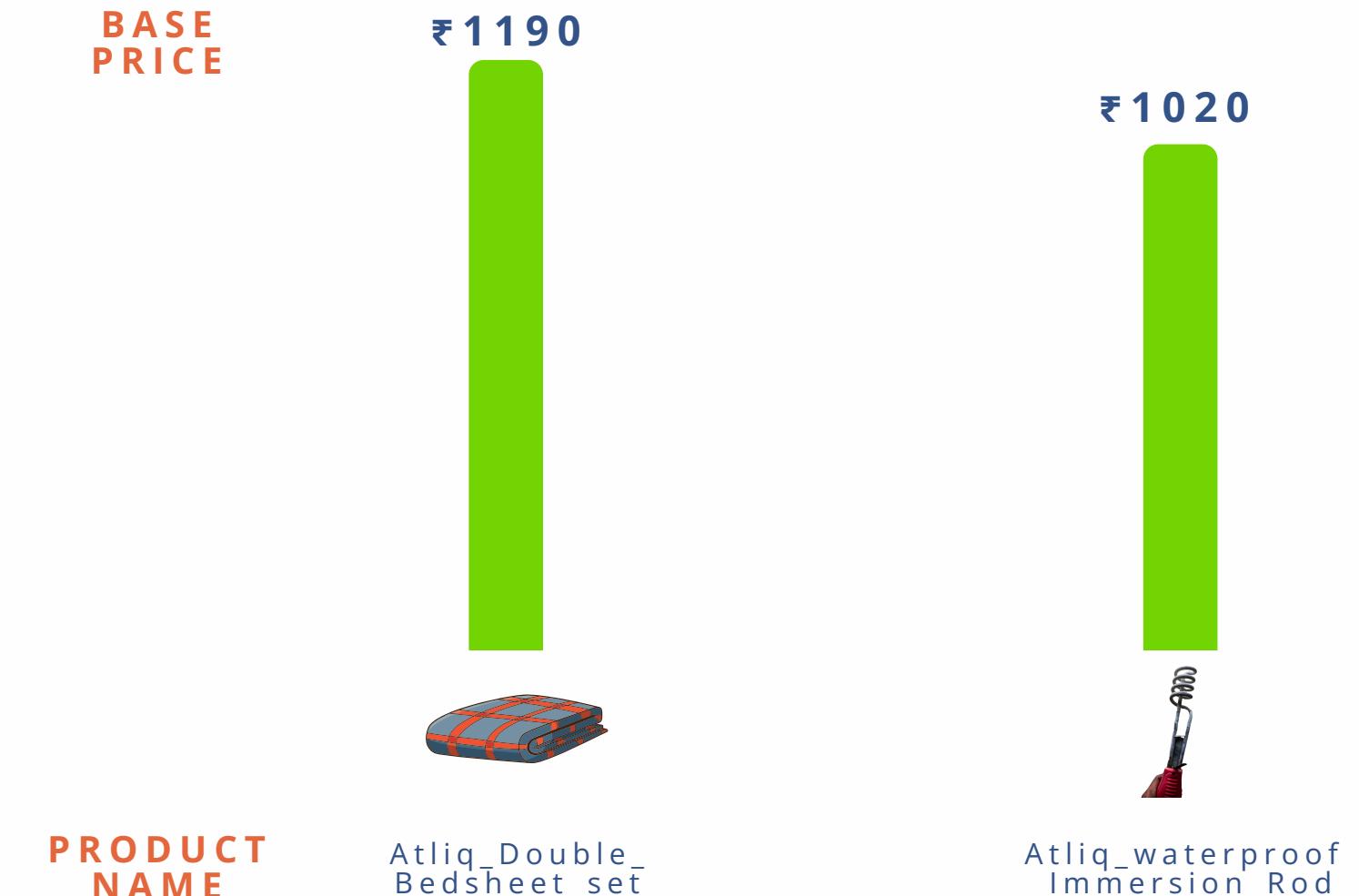
SELECT
    dp.product_name,
    fe.base_price,
    fe.promo_type
FROM
    dim_products dp
JOIN
    fact_events fe
ON
    dp.product_code = fe.product_code
WHERE
    fe.base_price > 500 AND fe.promo_type = 'BOGOF'
GROUP BY
    dp.product_name, fe.base_price, fe.promo_type;

```

### OUTPUT

PRODUCT NAME	BASE PRICE	PROMO TYPE
Atliq_Double_Bedsheet_set	1190	BOGOF
Atliq_waterproof_Immersion_Rod	1020	BOGOF

### INSIGHTS ON HIGH-VALUE BOGOF PROMOTIONS:



- Premium Discounts:** Products priced above ₹500 like Atliq\_Double\_Bedsheet\_set and Atliq\_waterproof\_Immersion\_Rod are BOGOF discounted.
- Strategic Value:** These promotions offer significant savings, potentially attracting more customers, enhancing sales volume.
- Evaluation Importance:** Analyzing BOGOF strategies for high-priced items crucial for pricing and promotion optimizations.

Generate a report that provides an overview of the number of stores in descending order of store counts, allowing us to identify the cities with the highest store presence. The report includes two essential fields: city and store count, which will assist in optimizing our retail operations.

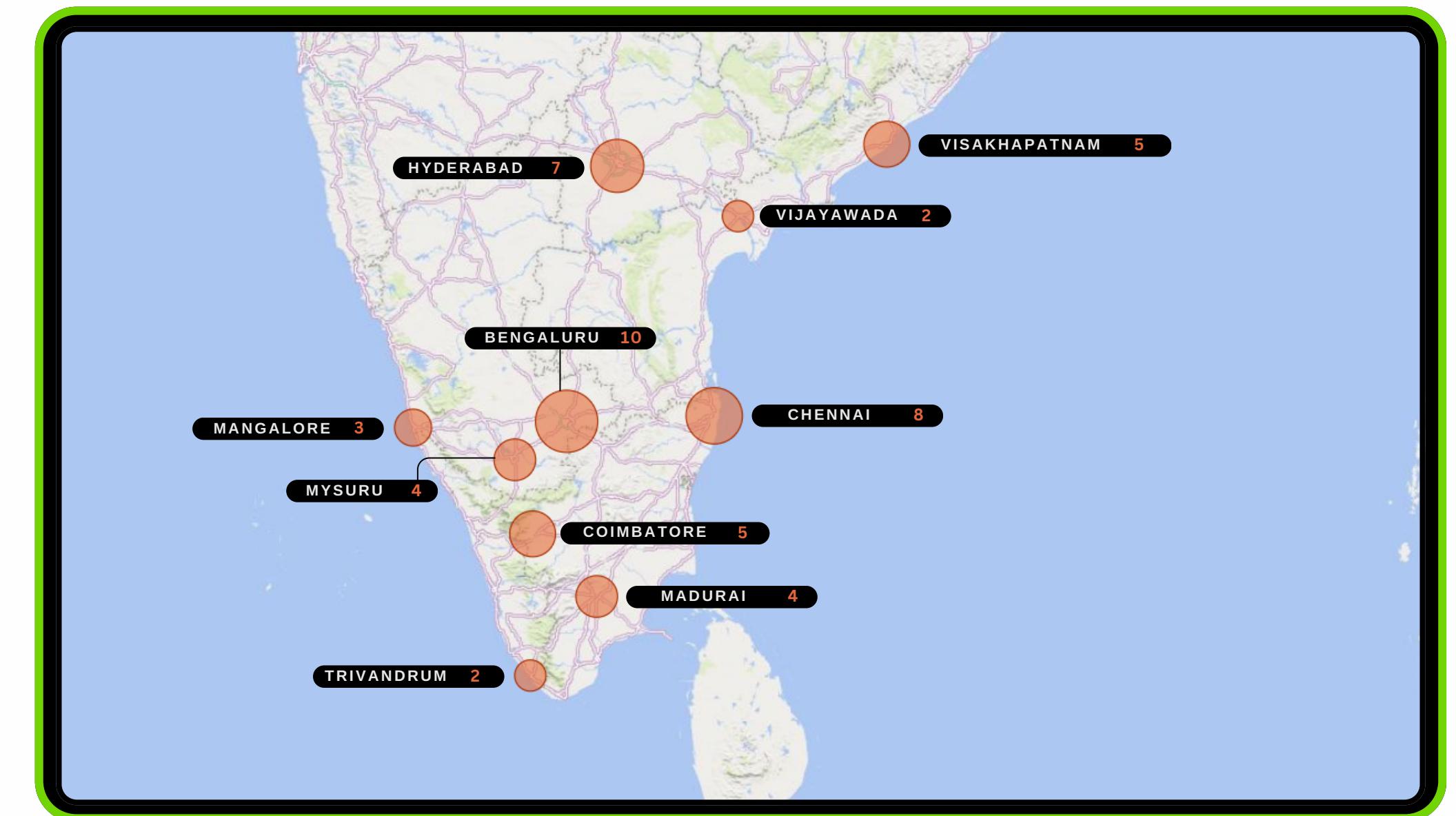
### SQL QUERY

```
SELECT
    City,
    count(store_id) AS 'store count'
FROM
    dim_stores ds
GROUP BY
    City
ORDER BY 2 DESC;
```

### OUTPUT

CITY	STORE COUNT
Bengaluru	10
Chennai	8
Hyderabad	7
Coimbatore	5
Visakhapatnam	5
Madurai	4
Mysuru	4
Mangalore	3
Trivandrum	2
Vijayawada	2

### OVERVIEW OF STORE PRESENCE BY CITY:



- Bengaluru Leads:** Bengaluru boasts the highest store count with 10 outlets, indicating a significant retail presence.
- Regional Distribution:** Chennai and Hyderabad follow closely with 8 and 7 stores respectively, showcasing substantial urban coverage.
- Tiered Presence:** Coimbatore, Visakhapatnam, Madurai, and Mysuru feature moderately with 4-5 stores, ensuring regional accessibility.

Generate a report that displays each campaign along with the total revenue generated before and after the campaign. The report includes three key fields: `campaign_name`, `total_revenue(before_promotion)`, and `total_revenue(after_promotion)`. This report should help in evaluating the financial impact of our promotional campaigns. (Display the value in millions)

### SQL QUERY

```

SELECT
    dc.campaign_name,
    ROUND(SUM(fe.base_price * fe.`quantity_sold(before_promo)`) / 1000000.0, 2) AS
    "total_revenue(before_promotion)",
    ROUND(SUM(
        case
            when promo_type = "50% OFF" then base_price*0.5*fe.`quantity_sold(after_promo)`
            when promo_type = "25% OFF" then base_price*0.75*fe.`quantity_sold(after_promo)`
            when promo_type = "33% OFF" then base_price*0.67*fe.`quantity_sold(after_promo)`
            when promo_type = "500 Cashback" then (base_price-500)*fe.`quantity_sold(after_promo)`
            when promo_type = "BOGOF" then base_price*0.5*fe.`quantity_sold(after_promo)`*2
        end
    ) / 1000000.0, 2) AS "total_revenue(after_promotion)"

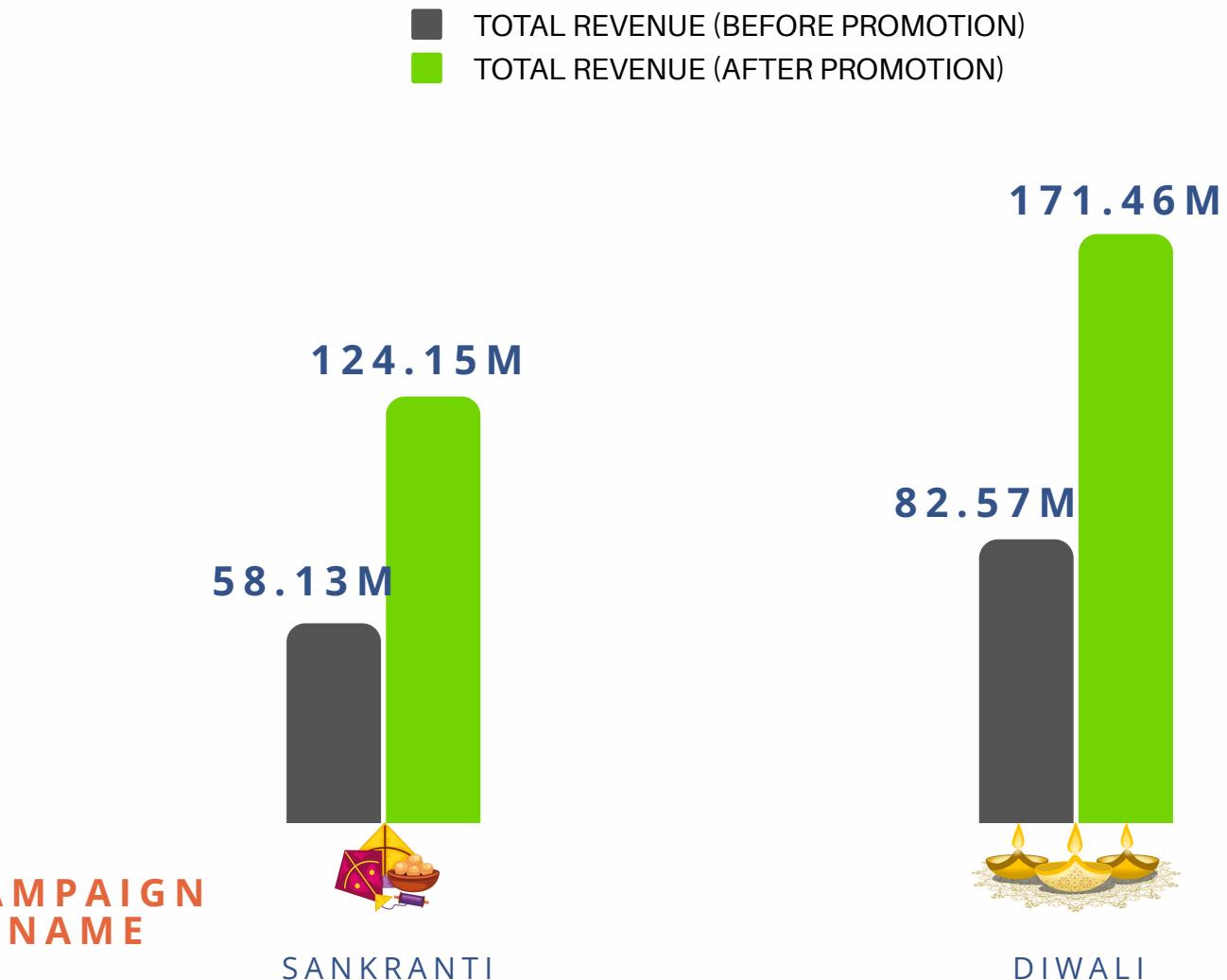
FROM
    dim_campaigns dc
JOIN
    fact_events fe ON dc.campaign_id = fe.campaign_id
GROUP BY
    dc.campaign_name;

```

### OUTPUT

CAMPAIGN NAME	TOTAL REVENUE (BEFORE PROMOTION)	TOTAL REVENUE (AFTER PROMOTION)
Sankranti	58.13	124.15
Diwali	82.57	171.46

### FINANCIAL IMPACT OF PROMOTIONAL CAMPAIGNS:



- **Sankranti Surge:** Revenue soared from ₹58.13M to ₹124.15M post-promotion, marking a substantial increase.
- **Diwali Delight:** Revenue surged from ₹82.57M to ₹171.46M, showcasing impressive growth post-promotion.
- **Promotion Efficacy:** Both the Sankranti and Diwali campaigns effectively doubled revenue, validating promotional effectiveness.

Produce a report that includes the Incremental Sold Quantity (ISU%) for each category during the Diwali campaign. Additionally, provide rankings for the categories based on their ISU%. The report will include three key fields: category, ISU%, and rank\_order. This information will assist in assessing the category-wise success and impact of the Diwali campaign on incremental sales.

NOTE: ISU%(Incremental Sold Quantity %) is calculated as the percentage increase/decrease in quantity sold(after promo) compared to quantity sold(before promo).

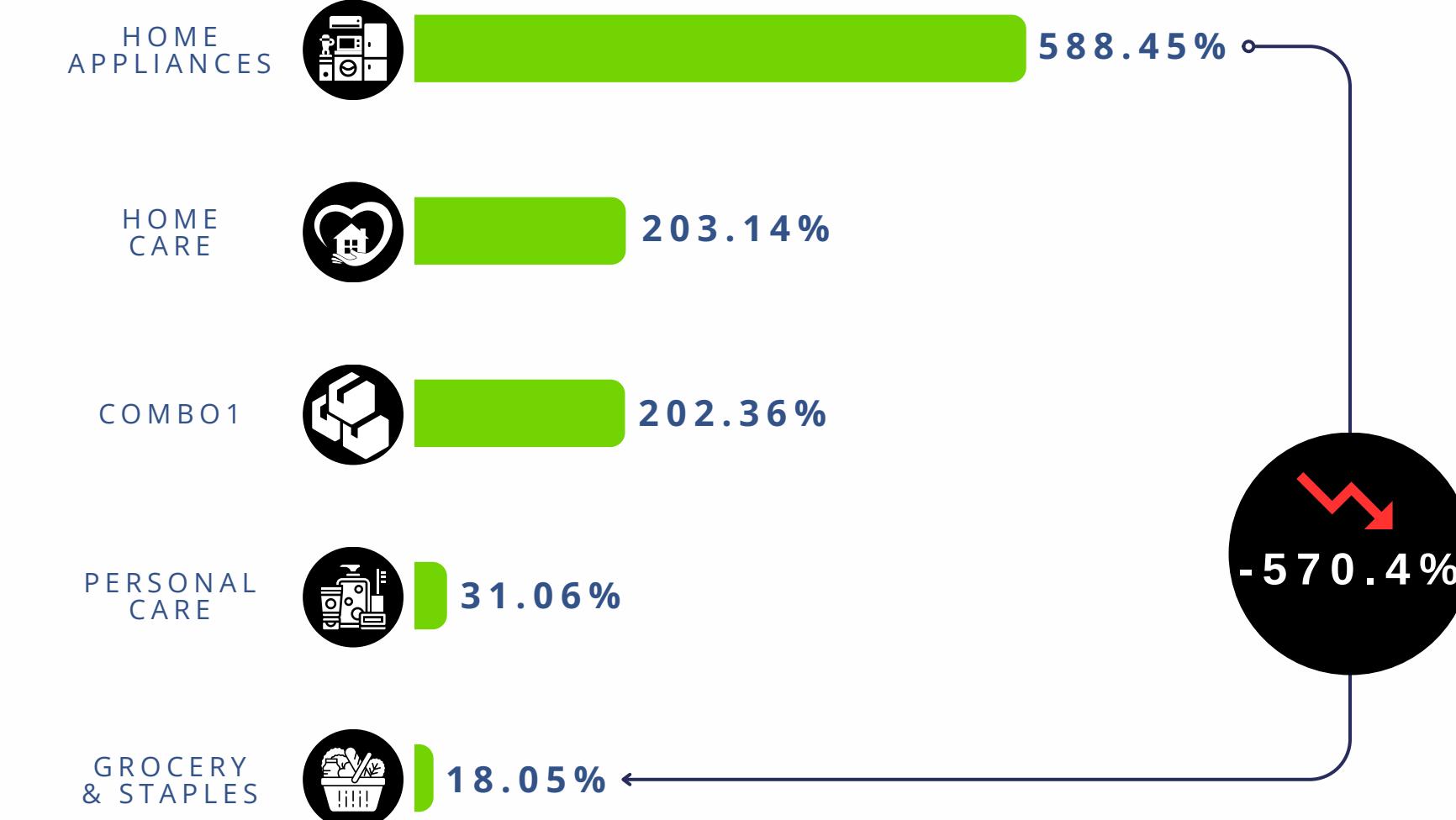
## OUTPUT

CATEGORY	ISU%	RANK ORDER
Home Appliances	588.45	1
Home Care	203.14	2
Combo1	202.36	3
Personal Care	31.06	4
Grocery & Staples	18.05	5

- Home Appliances Dominance:** Home Appliances category leads with a remarkable ISU% of 588.45%, securing the top rank.
- Home Care and Combo1 Success:** Home Care and Combo1 categories follow closely with ISU% of 203.14% and 202.36% respectively, securing second and third ranks.
- Recommendation:** Focus on promoting Home Appliances further, while sustaining efforts in Home Care and Combo1 for continued success.

## ASSESSING DIWALI CAMPAIGN IMPACT:

### CATEGORY



- Explore Growth Areas:** Investigate opportunities for expansion, particularly in GROCERY & STAPLES, to capitalize on market potential.

## SQL QUERY

```

WITH GroupedCategories AS (
    SELECT
        dp.category,
        ROUND(SUM(
            CASE
                WHEN fe.promo_type = "BOGOF" THEN fe.`quantity_sold(after_promo)` * 2
                ELSE fe.`quantity_sold(after_promo)`
            END - fe.`quantity_sold(before_promo)`) / NULLIF(SUM(fe.`quantity_sold(before_promo)`), 0) * 100, 2) AS Total_ISU_Percentage
    FROM
        dim_products dp
    JOIN
        fact_events fe ON dp.product_code = fe.product_code
    WHERE
        fe.campaign_id = (SELECT campaign_id FROM dim_campaigns WHERE campaign_name = 'Diwali')
    GROUP BY
        dp.category),
RankedCategories AS (
    SELECT
        category,
        Total_ISU_Percentage,
        RANK() OVER (ORDER BY Total_ISU_Percentage DESC) AS Rank_Order
    FROM
        GroupedCategories)
SELECT
    category,
    Total_ISU_Percentage,
    Rank_Order
FROM
    RankedCategories;

```

OUTPUT

Create a report featuring the Top 5 products, ranked by Incremental Revenue Percentage (IR%), across all campaigns. The report will provide essential information including product\_name, category, and IR%, This analysis helps identify the most successful products in terms of incremental revenue across our campaigns, assisting in product optimization.

## OUTPUT

PRODUCT NAME	CATEGORY	IR%	RANK ORDER
Atliq_waterproof_Immersion_Rod	Home Appliances	266.06	1
Atliq_High_Glo_15W_LED_Bulb	Home Appliances	262.28	2
Atliq_Double_Bedsheet_set	Home Care	258.4	3
Atliq_Curtains	Home Care	255.07	4
Atliq_Farm_Chakki_Atta (1KG)	Grocery & Staples	160.09	5

## INSIGHTS ON TOP PERFORMING PRODUCTS:



- **Home Appliances Lead:** Atliq\_waterproof\_Immersion\_Rod and Atliq\_High\_Glo\_15W\_LED\_Bulb dominate with highest IR%, ranking 1st and 2nd.
- **Home Care Success:** Atliq\_Double\_Bedsheet\_set and Atliq\_Curtains follow closely, securing 3rd and 4th ranks respectively.
- **Strategic Focus:** Prioritize stocking and promoting top-ranking products to maximize incremental revenue across campaigns.

## SQL QUERY

```

WITH GroupedProducts AS (
    SELECT
        dp.product_name,
        dp.category,
        ROUND(SUM(
            CASE
                WHEN fe.promo_type = '50% OFF' THEN base_price * 0.5 * fe.`quantity_sold(after_promo)`
                WHEN fe.promo_type = '25% OFF' THEN base_price * 0.75 * fe.`quantity_sold(after_promo)`
                WHEN fe.promo_type = '33% OFF' THEN base_price * 0.67 * fe.`quantity_sold(after_promo)`
                WHEN fe.promo_type = '500 Cashback' THEN (base_price - 500) * fe.`quantity_sold(after_promo)`
                WHEN fe.promo_type = 'BOGOF' THEN base_price * 0.5 * fe.`quantity_sold(after_promo)` * 2
                ELSE 0
            END
        ) / 1000000.0, 2) AS Incremental_Revenue_Million,
        ROUND(SUM(fe.base_price * fe.`quantity_sold(before_promo)` / 1000000.0, 2) AS Total_Revenue_Before_Promotion
    FROM
        dim_products dp
    JOIN
        fact_events fe ON dp.product_code = fe.product_code
    GROUP BY
        dp.product_name, dp.category),
RankedProducts AS (
    SELECT
        product_name,
        category,
        ROUND((Incremental_Revenue_Million - Total_Revenue_Before_Promotion) / NULLIF(Total_Revenue_Before_Promotion, 0) * 100, 2) AS IR_Percentage,
        RANK() OVER (ORDER BY (Incremental_Revenue_Million - Total_Revenue_Before_Promotion) / NULLIF(Total_Revenue_Before_Promotion, 0) DESC) AS Rank_Order
    FROM
        GroupedProducts)
SELECT
    product_name,
    category,
    IR_Percentage,
    Rank_Order
FROM
    RankedProducts
LIMIT 5;

```

# RECOMMENDED INSIGHTS

A Power BI Dashboard view Recommended Insights for sales Promotional Success. It includes :

**STORE PERFORMANCE ANALYSIS**



**PROMOTIONAL TYPE ANALYSIS**



**PRODUCT AND CATEGORY ANALYSIS**



ATLIQ MART

Tuesday, 5 March, 2024

HOME STORE PROMOTION PRODUCT

E. Mohamed ADMIN

Namaria, VISITOR

RETAIL MART

# PROMOTIONAL ANALYSIS FOR SALES DIRECTOR

## AN INSIGHTFUL REPORT

[View Presentation](#) [Watch Presentation](#)

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**HOME**  
An innovative Power BI report providing promotional analysis insights across the different categories available.

**STORE**  
Get TOPBOTTOM 100 BILLION stores across various metrics and City-wise top stores performance characteristics.

**PROMOTION**  
Get PROMOTIONS & 1000+ promotion types and investigate performance of different categories.

**PRODUCT**  
An insightful report for marketers showing product category performance based on promotions.

Last Refreshed Date : 30-Feb-2024 01:28 PM

Microsoft Power BI

38%

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## STORE PERFORMANCE ANALYSIS

- Mysore, Chennai & Bangalore predominant in top store location for promotions in Incremental Revenue. Combo1(Category) & 500 cashback(promo type) contributes the main revenue growth of nearly 60%.
- Mangalore, Visakhapatnam & Vijayawada as tiered cities lies in bottom Incremental Sold Units store. Personal care(Category) & discount-based promotions contributes < 10% put lags in the Sold Unit growth .
- IR serves as a clear indicator of promotion impact. Higher store count correlates with revenue growth, especially notable in Bangalore, Chennai, Hyderabad & Top-performing stores leverage Combo1(category) and Cashback promotions, contributing to approximately 60% of their success.



## PROMOTIONAL TYPE ANALYSIS

- Based on ISU% (which directly reflects the effectiveness of promotions in driving consumer purchases), BOGOF promotions outperform cashback (639.96% vs. 183.33%) and discount-based promotions (62.68%). Allocate resources to BOGOF for higher sales impact, ensuring optimal promotion strategy alignment.
- Top 2 promotions by IR are "500 Cashback" (91.05M) and "BOGOF" (69.32M), while bottom 2 in ISU are "50% Off" (6.9K) and "25% Off" (-5.7K). Focus on optimizing ISU for discount-based promotions to enhance sales impact.
- "500 Cashback" strikes a balance between ISU (40.9K) and margin% (57.65%), ensuring healthy sales and profitability. "BOGOF" maintains high ISU (372.3K) and margin% (72.78%), signifying robust sales impact with strong margins. Optimize "500 Cashback" promotions for balanced performance.



## PRODUCT AND CATEGORY ANALYSIS

- Atliq\_Suflower\_Oil (1L), Atliq\_Farm\_Chakki\_Atta (1KG) excelled in BOGOF, while Personal care Products underperformed in 25% off.
- Strong positive correlation observed between IR and ISU for Atliq Home Essential Combo(Combo1) and Atliq Farm Chakki Atta(Grocery).
- The correlation between promotion type effectiveness and product category suggests a strong association. For instance, "BOGOF" promotions demonstrate high ISU% across Grocery & Staples, Home Appliances, and Home Care categories, indicating their efficacy. Focus on optimizing promotion types per category accordingly.
- Home Appliances and Home Care categories saw the most significant lift in sales, of nearly 2-3X growth with products like Atliq waterproof Immersion Rod and Atliq Double Bedsheet set leading the surge. Focus on optimizing promotions for these categories to capitalize on sales growth.



DHANYAWAD



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FOR PROJECT OPPORTUNITY

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