



# **ATLIQ MART FESTIVAL SALES PROMOTIONAL ANALYSIS**

**\*\*CODEBASICS RESUME PROJECT CHALLENGE 9- DATA ANALYTICS PROJECT\*\***

**PREPARED BY  
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# OBJECTIVE

1. Analyzed dataset metadata thoroughly to understand its structure and contents, laying the foundation for subsequent analysis.
2. Reviewed recommendations outlined in "Recommended Insights.pdf" from manager Tony to inform analysis approach and focus areas.
3. Designed a user-friendly dashboard presenting key metrics and insights derived from the datasets for easy interpretation.
4. Generated SQL-based queries based on business questions outlined in "ad-hoc-requests.pdf" to address specific data needs identified by senior executives.

## Tools Used:

1. Excel for data preprocessing and transformation.
2. MySQL to find answers to business questions.
3. Power BI for data visualization and dashboard creation.



Data Analytics with  
MS Excel



My SQL/  
Sql Server



Data Visualization Using  
Power BI

# ABOUT THE PROJECT

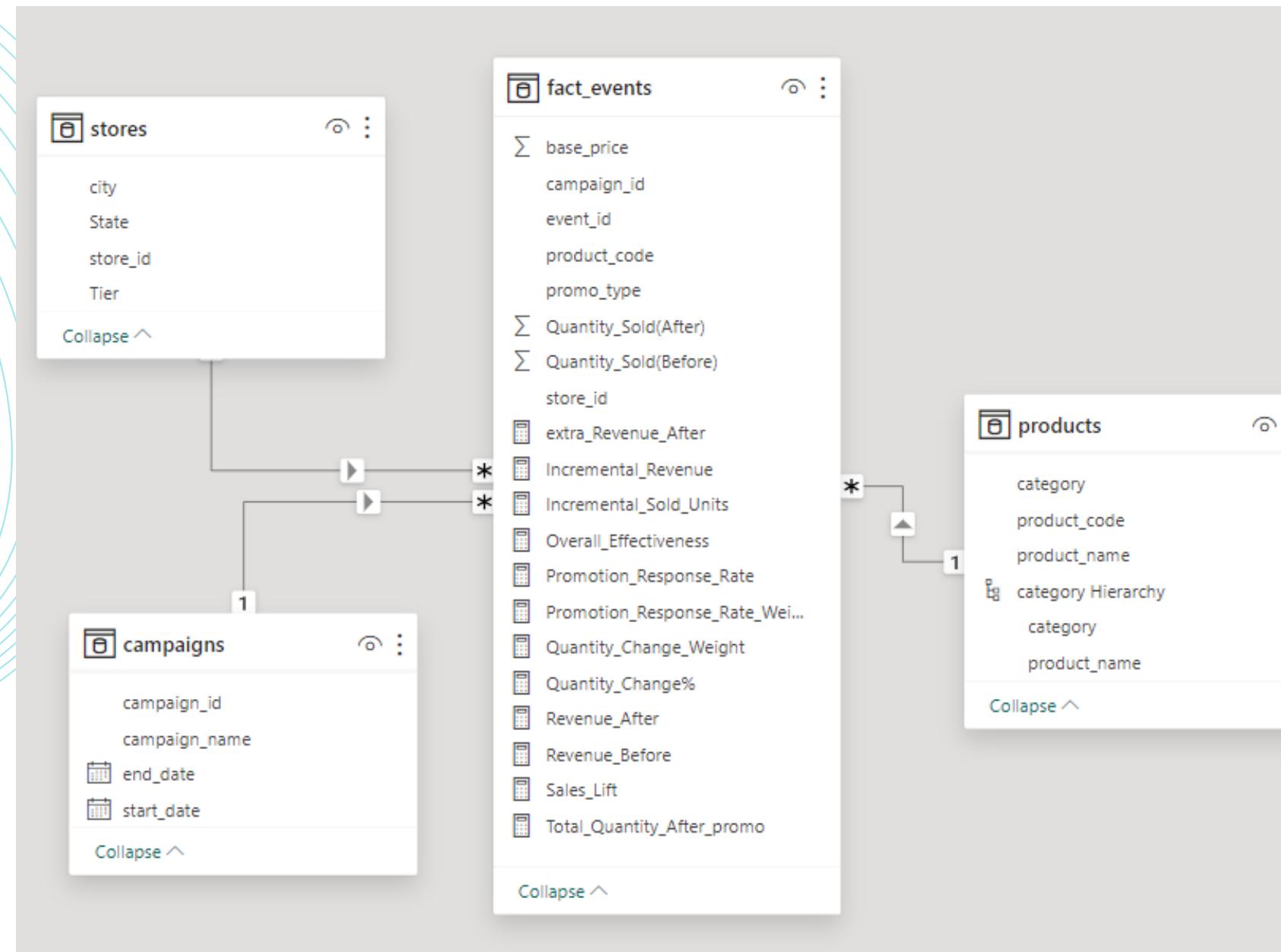
The project is about an imaginary retail giant called AtliQ Mart.



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.

Through this exercise 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.

# DATASET OVERVIEW



**dim\_campaigns**

campaign_id	campaign_name	start_date	end_date
CAMP_DIW_01	Diwali	12/11/2023	18/11/2023
CAMP_SAN_01	Sankranti	10/01/2024	16/01/2024

**dim\_stores**

store_id	city	State	Tier
STTRV-0	Trivandrum	Kerala	Tier 2
STMUDU-3	Madurai	Tamil Nadu	Tier 2
STHYD-6	Hyderabad	Telangana	Tier 1
STVSK-1	Visakhapatnam	Andhra Pradesh	Tier 2
STCBE-3	Coimbatore	Tamil Nadu	Tier 2

**dim\_products**

product_code	product_name	category
P01	Atliq_Masoor_Dal (1KG)	Grocery & Staples
P02	Atliq_Sonamasuri_Rice (10KG)	Grocery & Staples
P03	Atliq_Suflower_Oil (1L)	Grocery & Staples
P04	Atliq_Farm_Chakki_Atta (1KG)	Grocery & Staples

**fact\_events**

event_id	store_id	campaign_id	product_code	base_price	promo_type	quantity_sold(before_promo)	quantity_sold(after_promo)
7f650b	STCBE-2	CAMP_SAN_01	P11	190	50% OFF	34	52
a21f91	STBLR-8	CAMP_DIW_01	P03	156	25% OFF	393	322
78bc80	STVJD-0	CAMP_SAN_01	P07	300	BOGOF	22	85
a1503f	STCBE-1	CAMP_DIW_01	P15	3000	500 Cashback	329	1000

# DASHBOARD

The project is about an imaginary retail giant called AtliQ Mart.

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Through this exercise 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.

# RECOMMENDED INSIGHTS -STORE PERFORMANCE ANALYSIS

1. Which are the top 10 stores in terms of Incremental Revenue(IR) generated from the promotions?

Top 10 Stores based on the Incremental Revenue				
store_id	Incremental Revenue	City	State	Incremental_Sold_Units
STBLR-0	5,702,623.65	Bengaluru	Karnataka	12449
STBLR-3	4,748,443.40	Bengaluru	Karnataka	11459
STBLR-6	5,460,720.29	Bengaluru	Karnataka	12405
STBLR-7	5,583,587.33	Bengaluru	Karnataka	12820
STCHE-3	5,242,650.33	Chennai	Tamil Nadu	11720
STCHE-4	5,760,030.03	Chennai	Tamil Nadu	12150
STCHE-6	4,840,345.71	Chennai	Tamil Nadu	11144
STCHE-7	5,500,225.72	Chennai	Tamil Nadu	12516
STMYS-1	5,859,313.54	Mysuru	Karnataka	12677
STMYS-3	5,358,791.98	Mysuru	Karnataka	10173

The best stores are in Bengaluru, Chennai, and Mysuru. In Bengaluru, 4 out of 10 stores are in the top 10. Chennai also has 4 out of its 8 stores in the top 10. Mysuru has 2 out of its 4 stores in the top 10.

# RECOMMENDED INSIGHTS -STORE PERFORMANCE ANALYSIS

## 2. Which are the bottom 10 store when it comes to Incremental Sold Units (ISU)?

Bottom 10 Stores based on the Incremental Sold Units				
store_id	Incremental_Sold_Units	City	State	Incremental_Revenue
STMLR-0	3978	Mangalore	Karnataka	1,513,446.24
STVSK-3	4553	Visakhapatnam	Andhra Pradesh	2,028,746.47
STVSK-4	4988	Visakhapatnam	Andhra Pradesh	2,232,533.11
STTRV-1	5072	Trivandrum	Kerala	2,007,666.09
STVJD-1	5302	Vijayawada	Andhra Pradesh	2,412,046.70
STTRV-0	5306	Trivandrum	Kerala	2,164,829.42
STMLR-2	5374	Mangalore	Karnataka	2,293,949.08
STMLR-1	5481	Mangalore	Karnataka	2,237,923.88
STVJD-0	5870	Vijayawada	Andhra Pradesh	2,457,596.42
STCBE-4	5942	Coimbatore	Tamil Nadu	2,422,561.95

All three stores from Mangalore are among the bottom 10 for Incremental Sold Units (ISU). Similarly, both stores from Trivandrum are also in the bottom 10. Additionally, two out of four stores from Visakhapatnam are also in the bottom 10 for ISU.

# RECOMMENDED INSIGHTS -STORE PERFORMANCE ANALYSIS

3. How does the performance of stores vary by city? Are there any common characteristics among the top-performing stores that could be leverages across other stores?



Stores located in Tier 1 cities like Bengaluru and Chennai exhibit superior performance. Additionally, there's a notable correlation between the number of stores and revenue generation, suggesting that a higher store count contributes to increased revenue. Furthermore, selling a greater quantity of products also positively impacts revenue generation.

# RECOMMENDED INSIGHTS -PROMOTION TYPE ANALYSIS

1. What are the top 2 promotion types that resulted in the highest Incremental Revenue?



The top promotion types that resulted in the highest incremental revenue are "500 Cashback" and "BOGOF" (Buy One Get One Free).

- This is due to their effectiveness in incentivizing purchases.
- "500 Cashback" offers a direct monetary benefit to customers, encouraging them to make purchases to avail the cashback. On the other hand, "BOGOF" offers customers the perception of getting more value for their money, driving increased sales volume by providing an additional product for free with a purchase.

# RECOMMENDED INSIGHTS -PROMOTION TYPE ANALYSIS

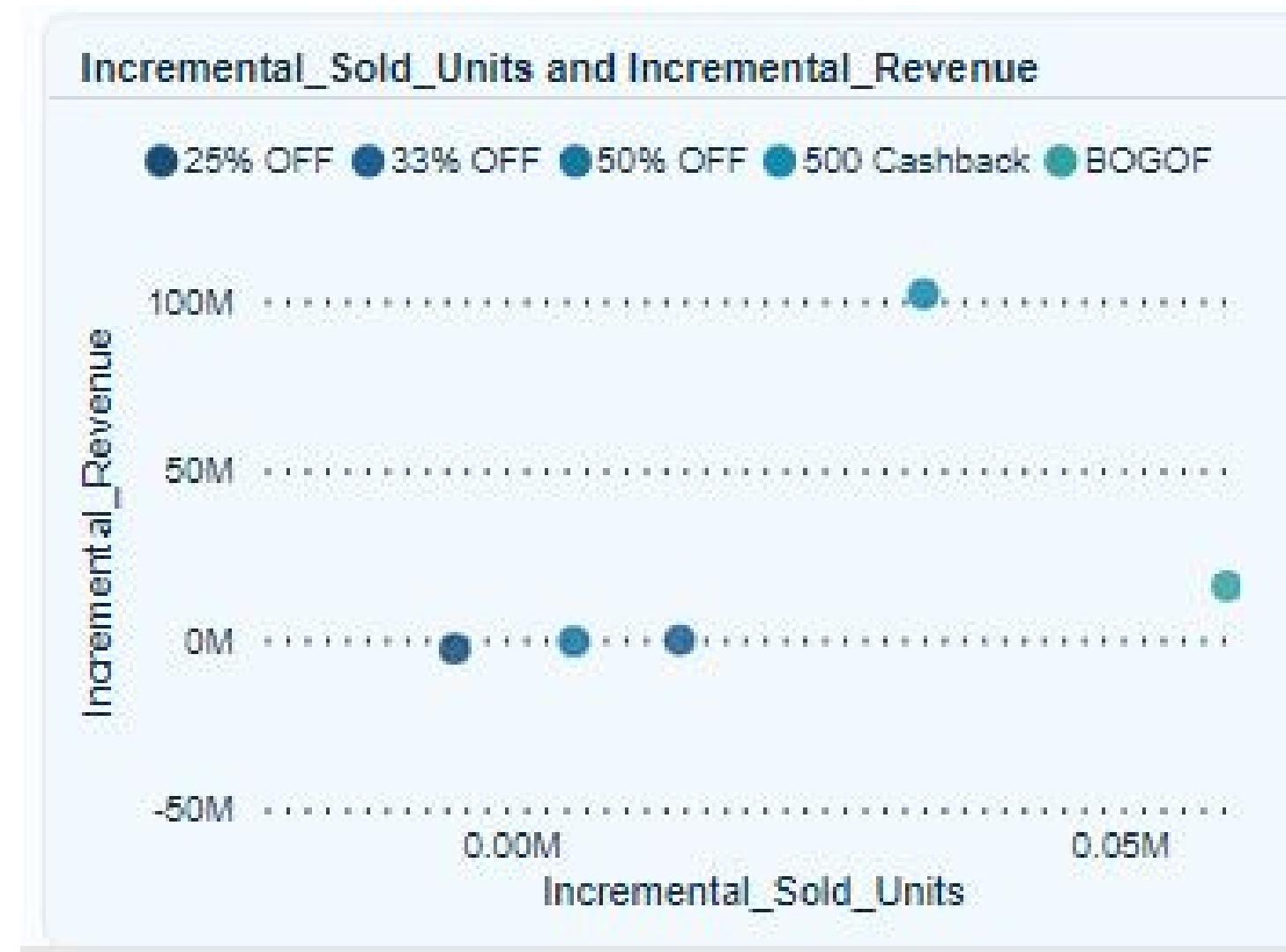
2. What are the bottom 2 promotion types in terms of their impact on Incremental Sold Units?



"25% off" and "50% off" promotion types are among the least effective in terms of driving incremental sold units. These promotions may be less effective in driving incremental sales due to their reliance solely on price reduction, potentially leading to perceptions of lower product value.

# RECOMMENDED INSIGHTS -PROMOTION TYPE ANALYSIS

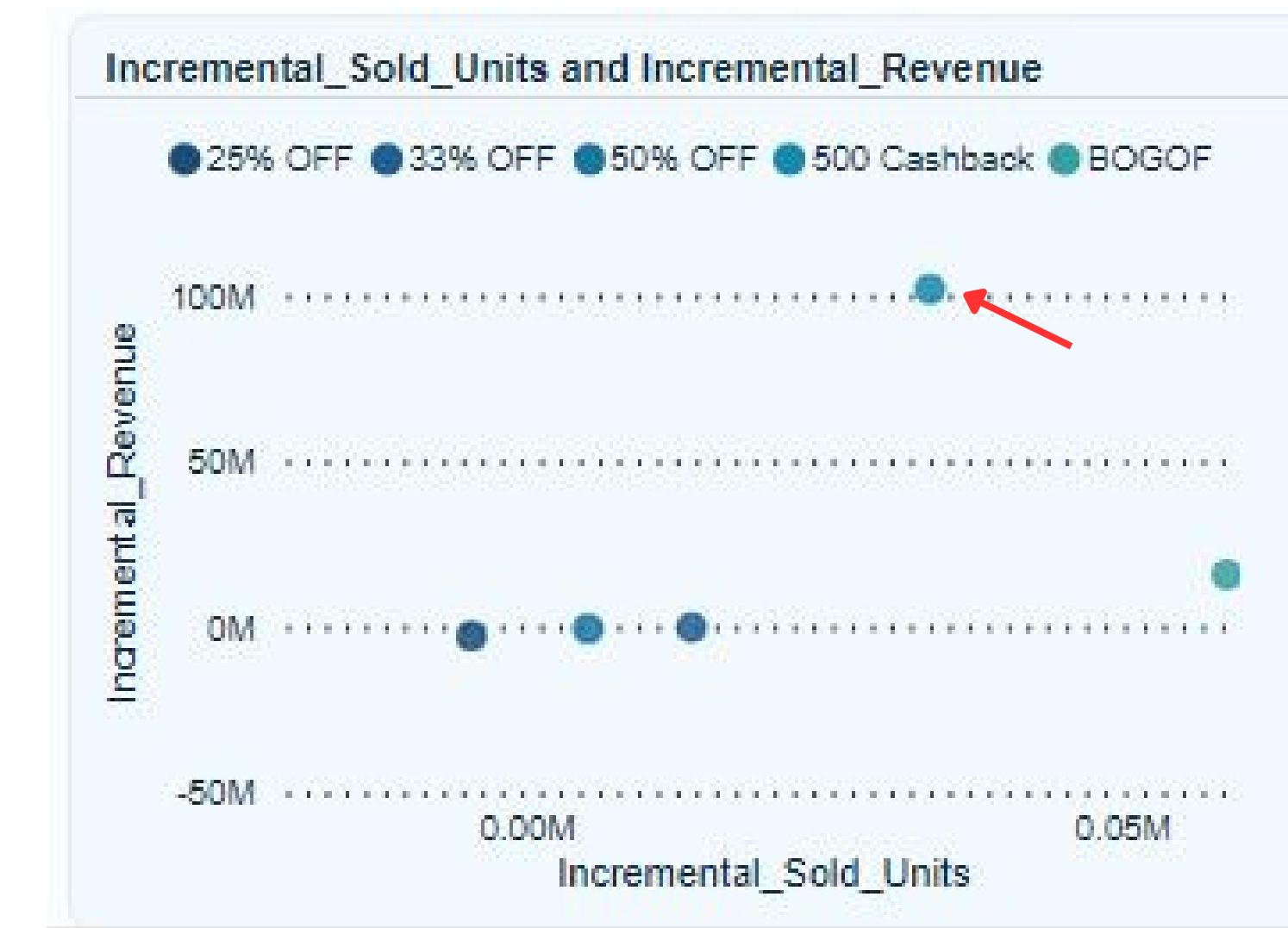
3. Is there any significance difference in the performance of discount-based promotions versus BOGOF (Buy One Get One Free) or cashback promotions?



500 Cashback and BOGOF promotions have outperformed discount-based offers, likely due to their perceived value addition beyond mere price reduction. By providing tangible benefits like cash returns or free items, these promotions effectively incentivize purchases and attract customers, thereby driving sales and enhancing revenue.

# RECOMMENDED INSIGHTS -PROMOTION TYPE ANALYSIS

4. Which promotions strike the best balance between Incremental Sold Units and maintaining healthy margins?



500 cashback promotion strikes the best balance between Incremental Sold Units and maintaining healthy margins. It offers a direct monetary benefit to customers, incentivizing purchases without requiring them to buy multiple items or wait for a discount. This immediate cashback appeal can attract more customers and lead to higher sales volume while still maintaining healthy profit margins.

# RECOMMENDED INSIGHTS -PRODUCT AND CATEGORY ANALYSIS

1. Which product categories saw the most significant lift in sales from the promotions?



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`Sales_Lift =  
DIVIDE([Revenue_After] - [Revenue_Before], [Revenue_Before])`

I used above formula to calculate the Sales\_Lift.

The home appliance, combo 1, and home care categories experienced the most significant increase in sales as a result of the promotions.

# RECOMMENDED INSIGHTS -PRODUCT AND CATEGORY ANALYSIS

## 2. Are there specific products that respond exceptionally well or poorly to promotions?

product_name	Category	Promotion_Response_Rate	Quantity_Change%
waterproof_Immersion_Rod	Home Appliances	266.19	632.37
High_Glo_15W_LED_Bulb	Home Appliances	262.98	625.97

product_name	Category	Promotion_Response_Rate	Quantity_Change%
Home_Essential_8_Product_Combo	Combo1	183.26	183.33

product_name	Category	Promotion_Response_Rate	Quantity_Change%
Doodh_Kesar_Body_Lotion (200ML)	Personal Care	-33.21	33.57
Lime_Cool_Bathing_Bar (125GM)	Personal Care	-33.40	33.20
Cream_Beauty_Bathing_Soap (125GM)	Personal Care	-35.00	20.64
Body_Milk_Nourishing_Lotion (120ML)	Personal Care	-35.95	9.35

Yes, certain products respond exceptionally well or poorly to promotions.

- For example, products like the waterproof immersion rod, high glo 15w LED bulb, and home essentials 8-product combo performed exceptionally well during the promotions.
- On the other hand, products belonging to the personal care category did not perform that well.
- This indicates that the effectiveness of promotions can vary significantly depending on the product category and the specific products being promoted.

# RECOMMENDED INSIGHTS -PRODUCT AND CATEGORY ANALYSIS

## 3. What is the correlation between product category and promotion type effectiveness?

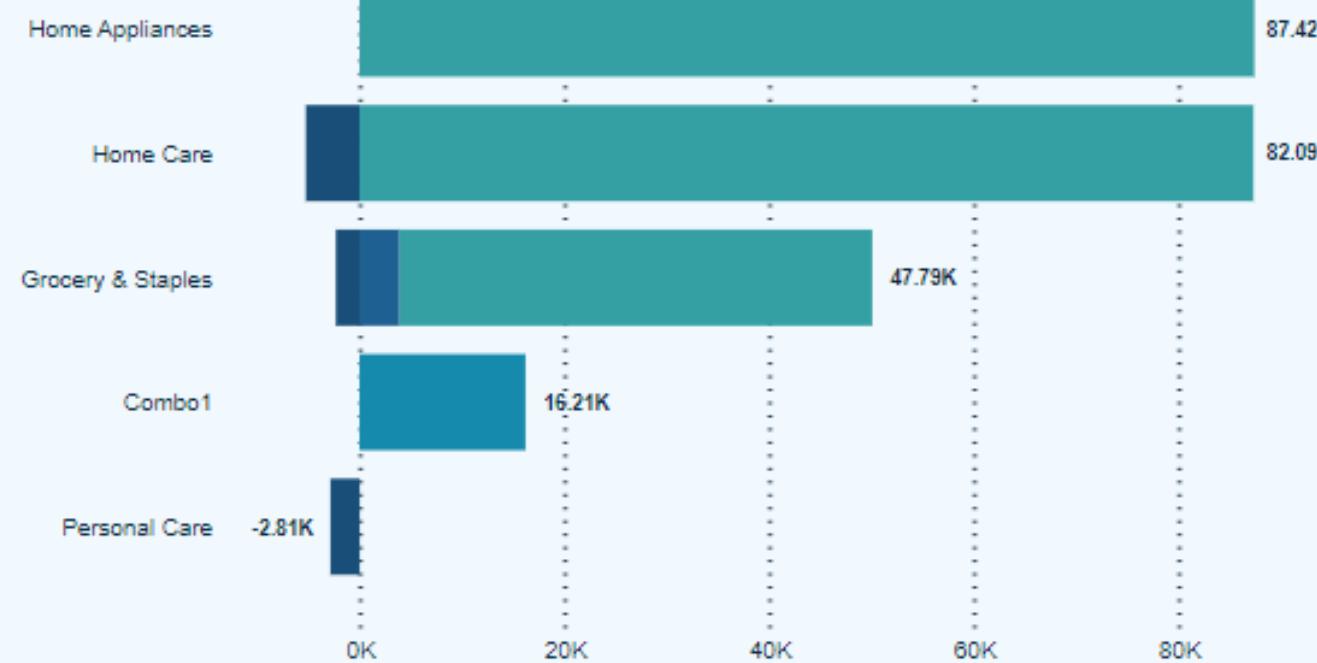
Change the weights of Incremental Revenue or Incremental Sold Units to get the Overall Effectiveness of Promotion Type

PRR\_Weight  
1.00

QCP\_Weight  
1.00

Overall\_Effectiveness by category and promo\_type

25% OFF 33% OFF 50% OFF 500 Cashback BOGOF



Overall\_Effectiveness =

```
(  
    SUMX(fact_events, [Promotion_Response_Rate] * [Promotion_Response_Rate_Weight]) +  
    SUMX(fact_events, [Quantity_Change%] * [Quantity_Change_Weight])  
) /  
( [Promotion_Response_Rate_Weight] + [Quantity_Change_Weight] )
```

I used above formula to calculate the Sales\_Lift.

The user can change the weights of Incremental Revenue or Incremental Sold Units to understand Impact on the overall effectiveness.

Certain product categories, such as home appliances, home care, grocery, and staples, performed well in BOGOF promotions, indicating that this promotion type was effective in driving sales within these categories. Conversely, personal care products did not perform well, even with a 25% discount offer.

# BUSINESS REQUESTS

- Provide a list of products with base price greater than 500 and that are featured in promo type of 'BOGOF' (Buy One Get One Free).

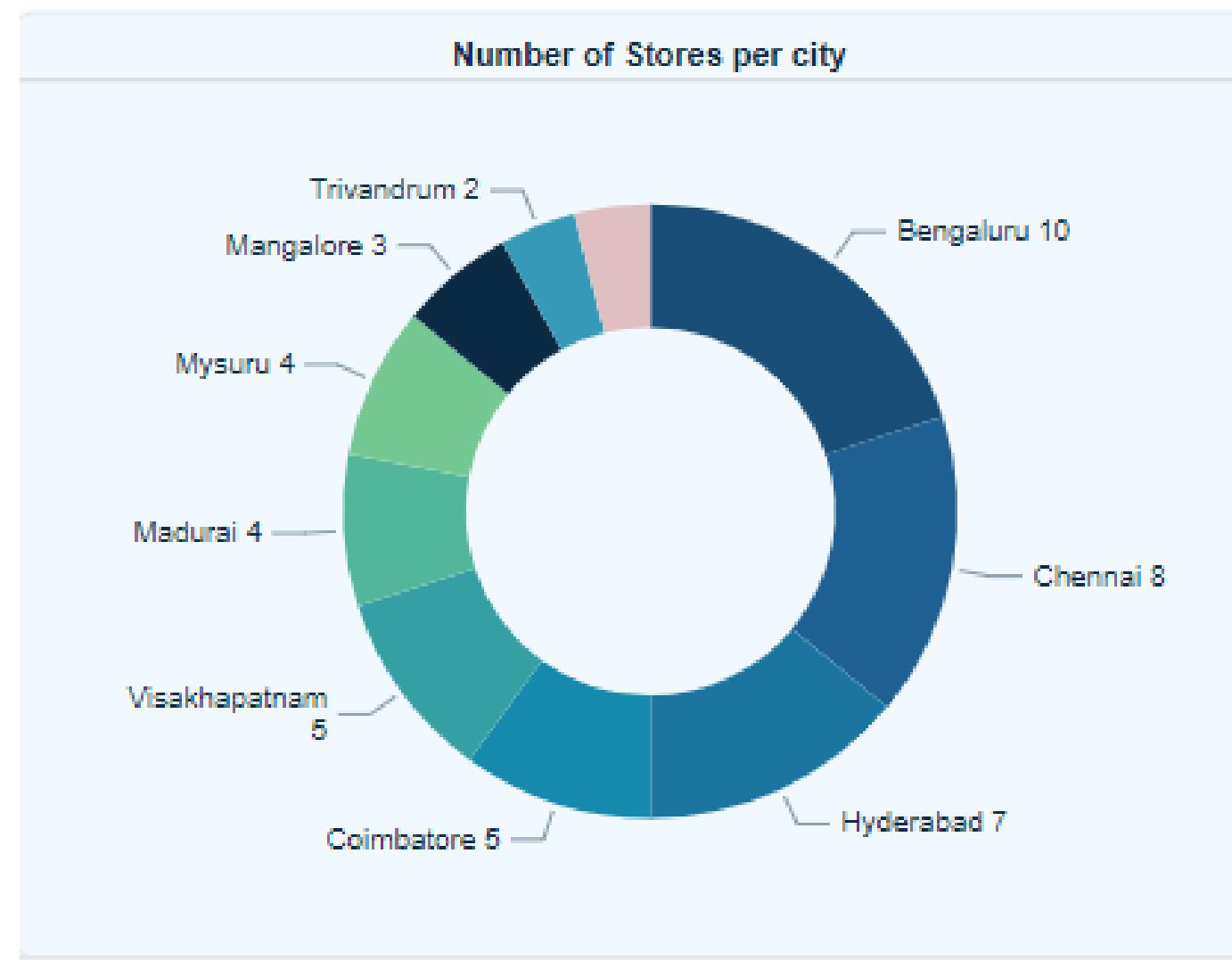


Atliq\_Double\_Bedsheet\_set and Atliq\_waterproof\_Immersion\_Rod are the two products with base price greater than 500 which are featured under BOGOF (Buy One Get One Free) promo type.

# BUSINESS REQUESTS

2. Generate a report that provides an overview of the number of stores in each city.

City	Store_Count
Bengaluru	10
Chennai	8
Hyderabad	7
Coimbatore	5
Visakhapatnam	5
Madurai	4
Mysuru	4
Mangalore	3
Trivandrum	2
Vijayawada	2

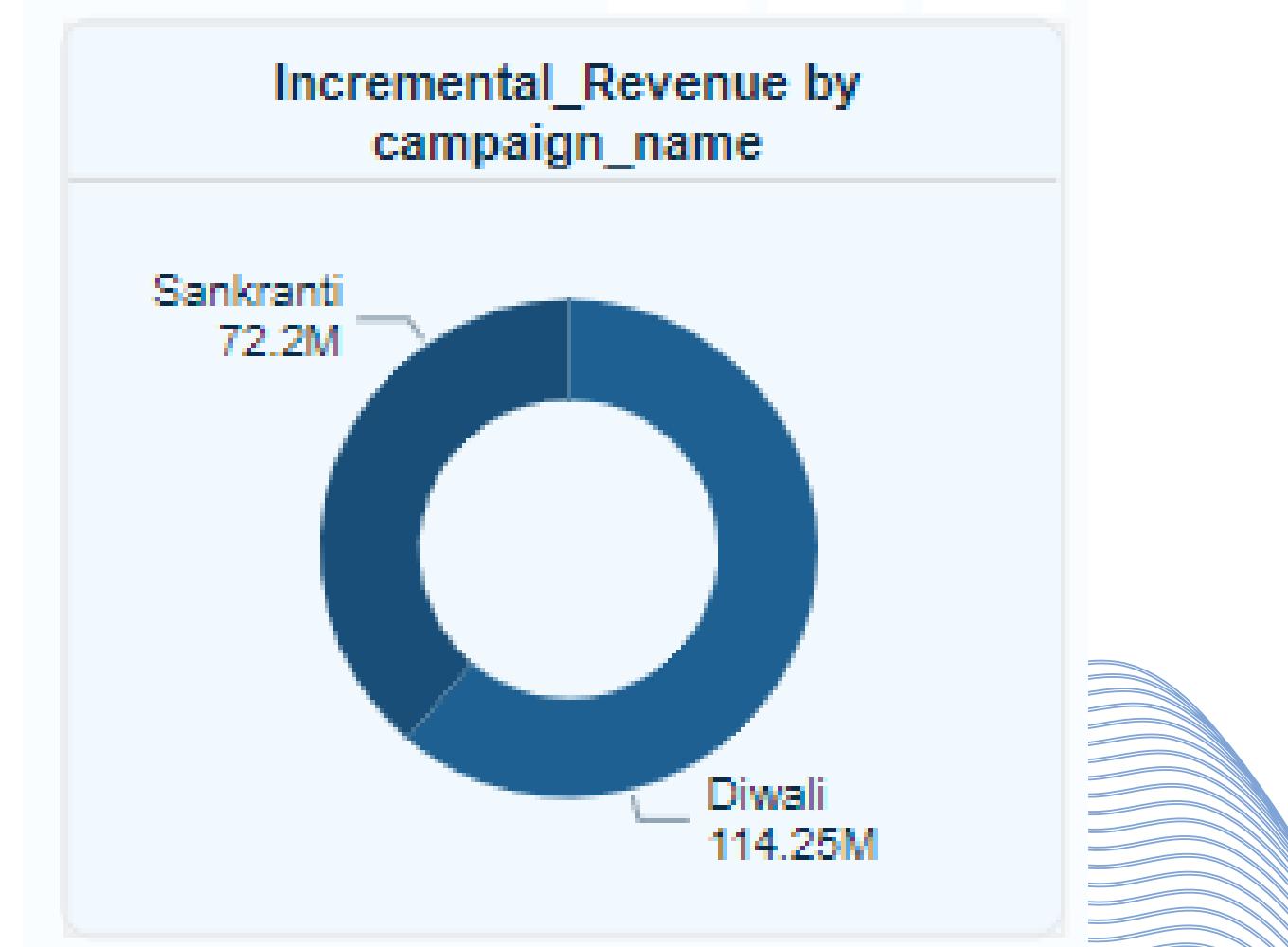


In terms of store count, Bengaluru leads with 10 stores, followed by Chennai with 8 stores, and Hyderabad with 7 stores.

# BUSINESS REQUESTS

3. Generate a report that displays each campaign along with the total revenue generated before and after the campaign?

	campaign_name	Before_Campaign_Total_Revenue_Million	After_Campaign_Total_Revenue_Million	Incremental_Revenue_Million
▶	Sankranti	58.13	130.33	72.20
	Diwali	82.57	196.82	114.25

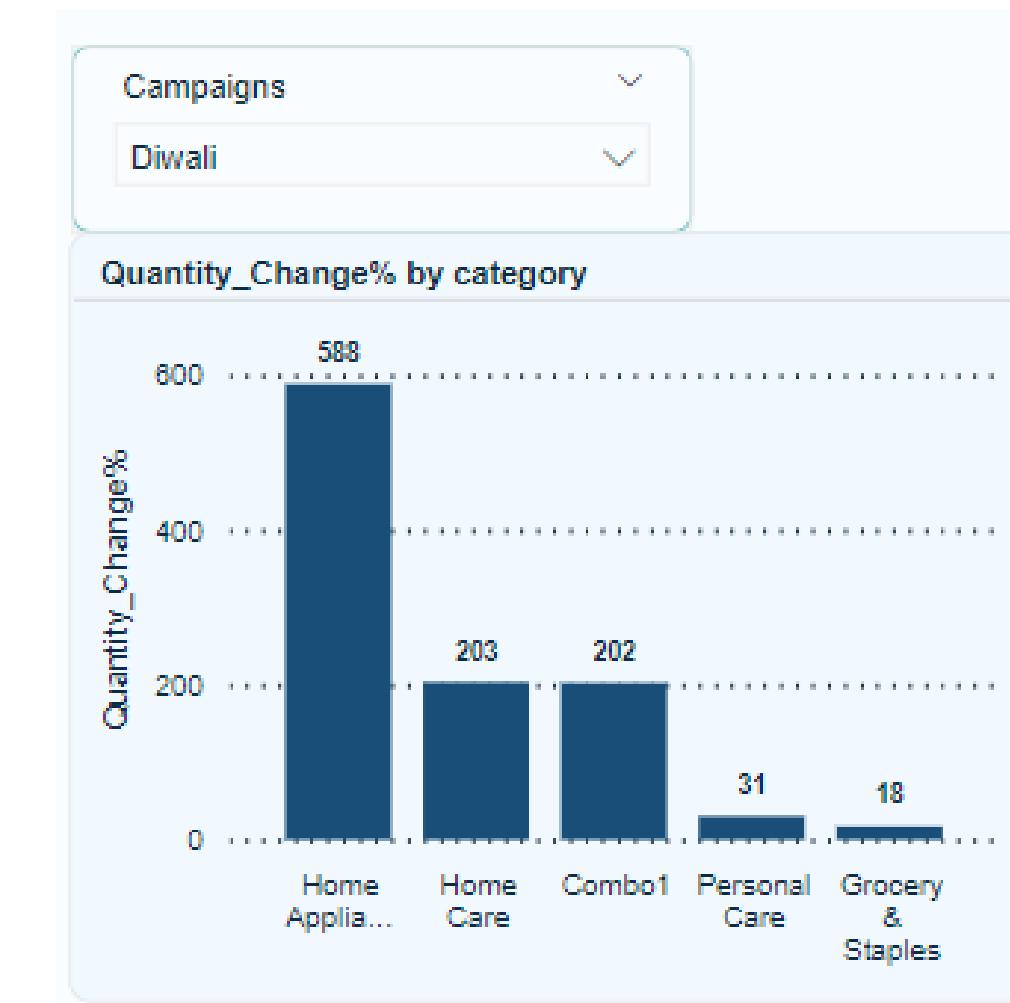


Diwali campaign generated the highest incremental revenue at 114.25 million, while the Sankranthi campaign yielded 72.20 million.

# BUSINESS REQUESTS

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%.

category	ISU_percentage	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

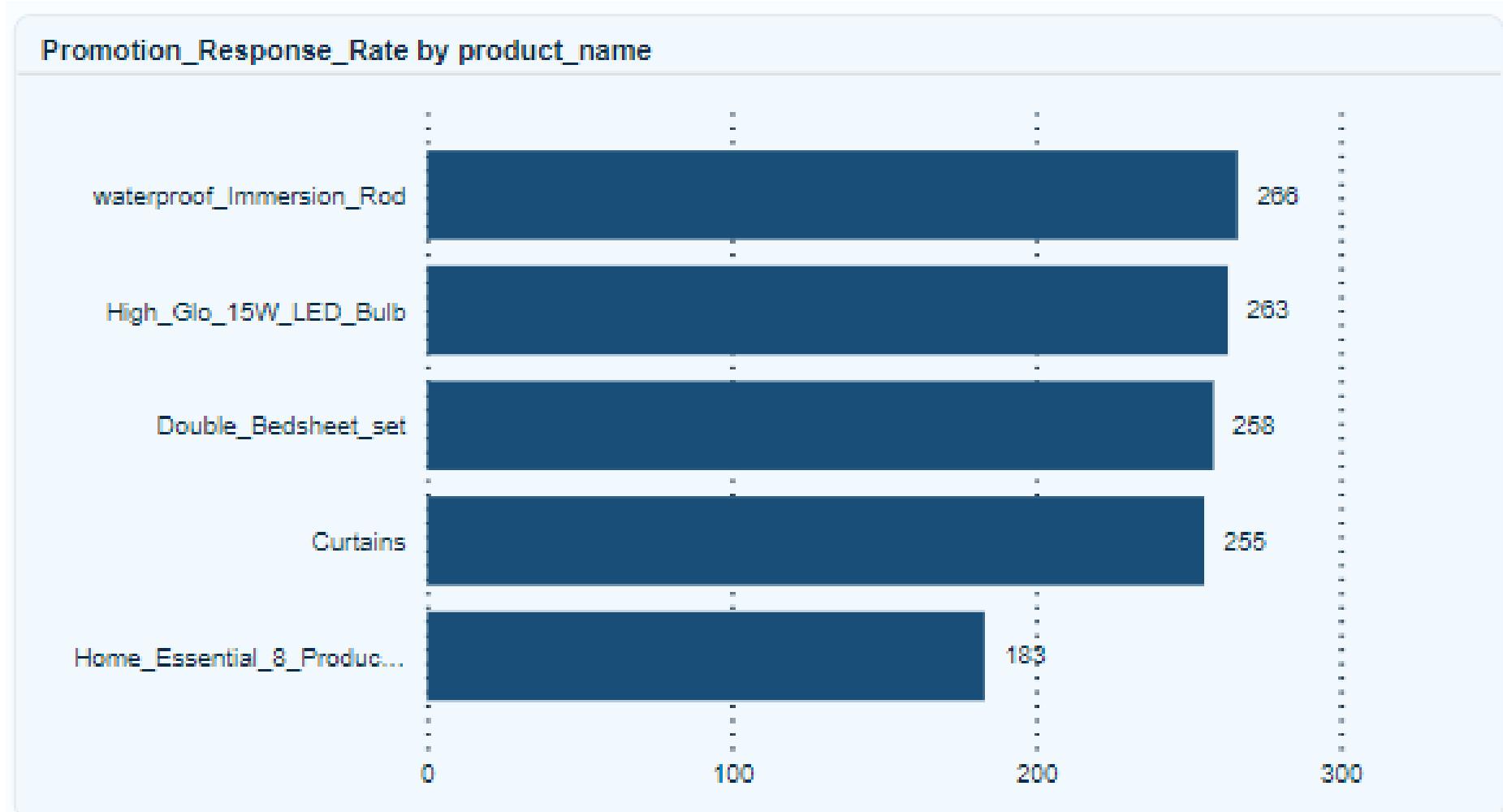


Home Appliances category exhibits the highest ISU% increase, followed by the Home Care and Combo1 categories. Notably, there is a remarkable 588% ISU% surge in the Home Appliances category, while Home Care is at 203.14%, Combo1 follows closely behind with a 202.36% increase.

# BUSINESS REQUESTS

5. Create a report featuring the Top 5 products, ranked by Incremental Revenue Percentage (IR%), across all campaigns.

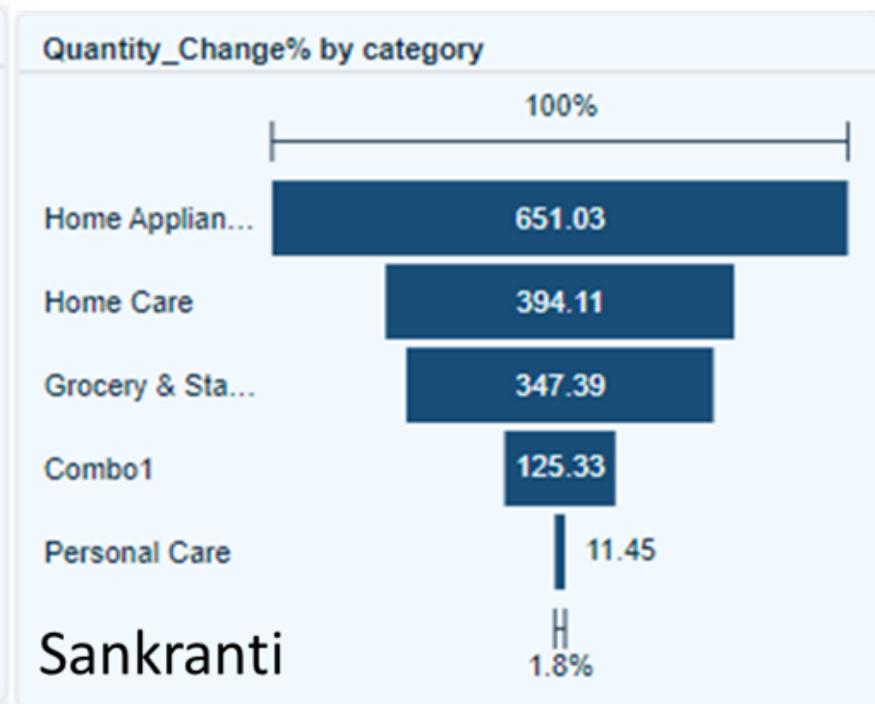
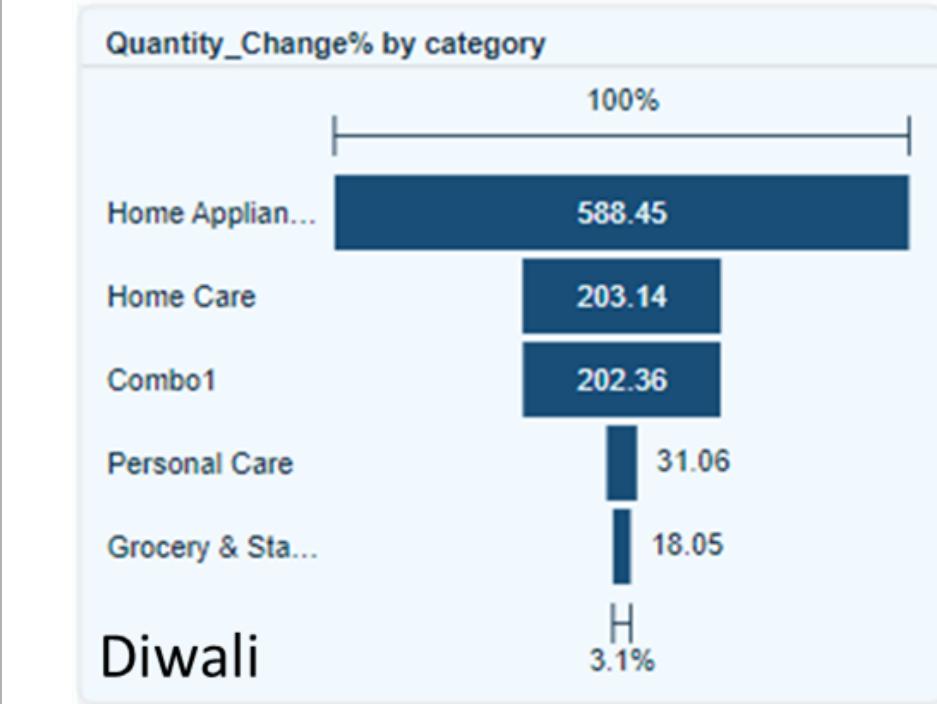
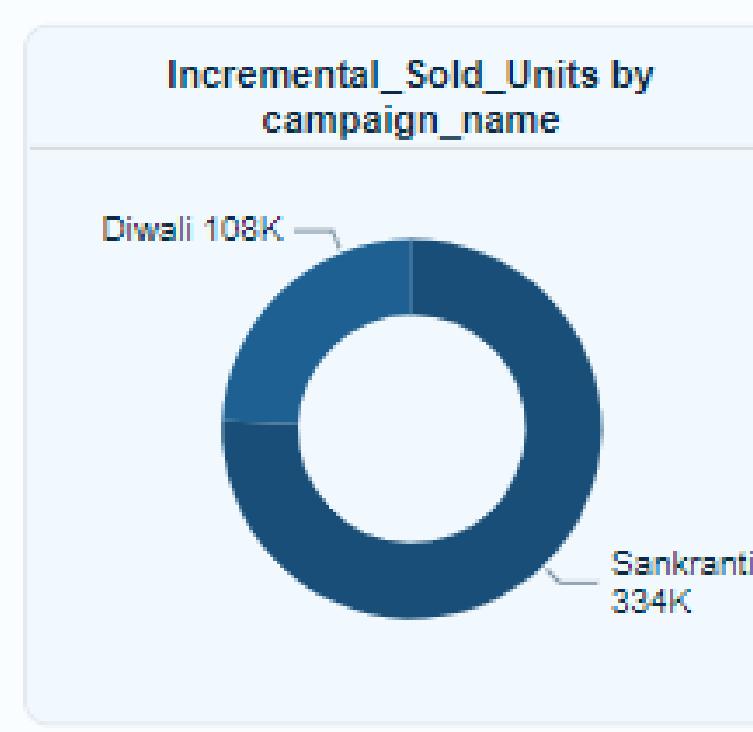
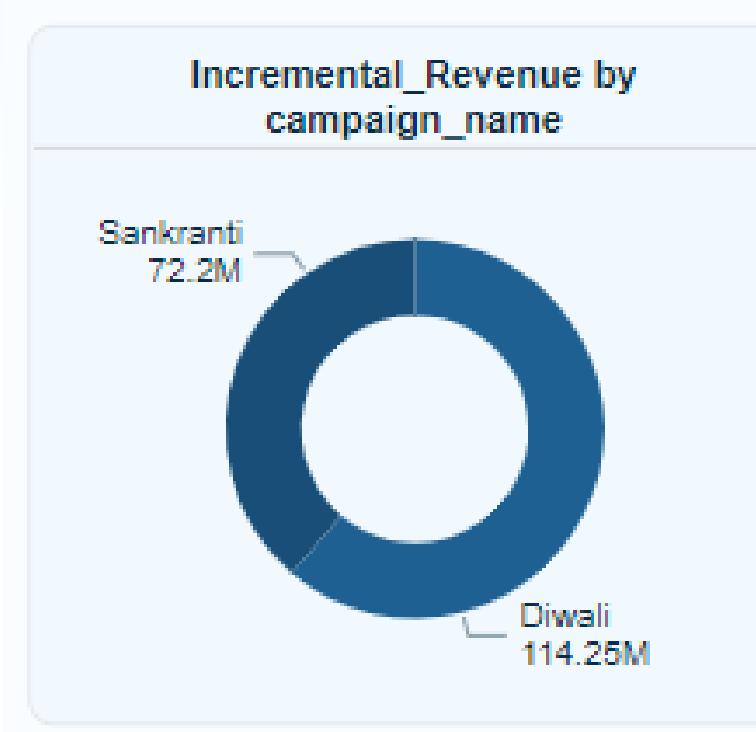
product_name	category	IR_percentage
Atliq_waterproof_Immersion_Rod	Home Appliances	266.19
Atliq_High_Glo_15W_LED_Bulb	Home Appliances	262.98
Atliq_Double_Bedsheet_set	Home Care	258.27
Atliq_Curtains	Home Care	255.34
Atliq_Home_Essential_8_Product_Combo	Combo1	183.26



Atlique\_waterproof\_Immersion\_Rod leads with an IR% of 266.19%, closely followed by Atliq\_High\_Glo\_15W\_LED\_Bulb with an IR% of 262.98%. Atliq\_Double\_Bedsheet\_Set, Atliq\_Curtains, Atliq\_Home\_Essential\_8\_Product\_Combo made significant contribution to revenue generation.

# ADDITIONAL INSIGHTS

While the quantity of units sold during Diwali is approximately 100% less compared to Sankranti, the revenue generated during Diwali is 45% higher than the revenue generated during Sankranti.



- During Sankrathi, there were six products available under the "Buy One Get One Free" (BOGOF) promotion, whereas Diwali featured only four such products.
- Consumer behavior during Diwali favored purchases in categories like home appliances, home care, and combo products, resulting in higher revenue. Conversely, during Sankrathi, there was a greater preference for purchases in the grocery and staples categories.
- During Diwali, consumers prioritize home-related purchases due to the tradition of exchanging gifts and decorating homes, while Sankrathi's focus on feasting and traditional rituals leads to a preference for food items.

# ADDITIONAL INSIGHTS

The sale of sunflower oil and fresh chakki atta significantly increased during Sankranti when the promotion type was BOGOF, compared to Diwali when it was on a 25% discount.

## Diwali

Suflower_Oil (1L)	Grocery & Staples	-33.76	-11.69	25% OFF
Farm_Chakki_Atta (1KG)	Grocery & Staples	-34.24	-12.32	25% OFF

## Sankranti

product_name	Category	Promotion_Response_Rate	Quantity_Change%	promo_type
Suflower_Oil (1L)	Grocery & Staples	276.36	652.72	BOGOF
Farm_Chakki_Atta (1KG)	Grocery & Staples	275.13	650.26	BOGOF
Sonamasuri_Rice (10KG)	Grocery & Staples	-6.94	38.90	33% OFF
Masoor_Dal (1KG)	Grocery & Staples	-6.94	38.89	33% OFF

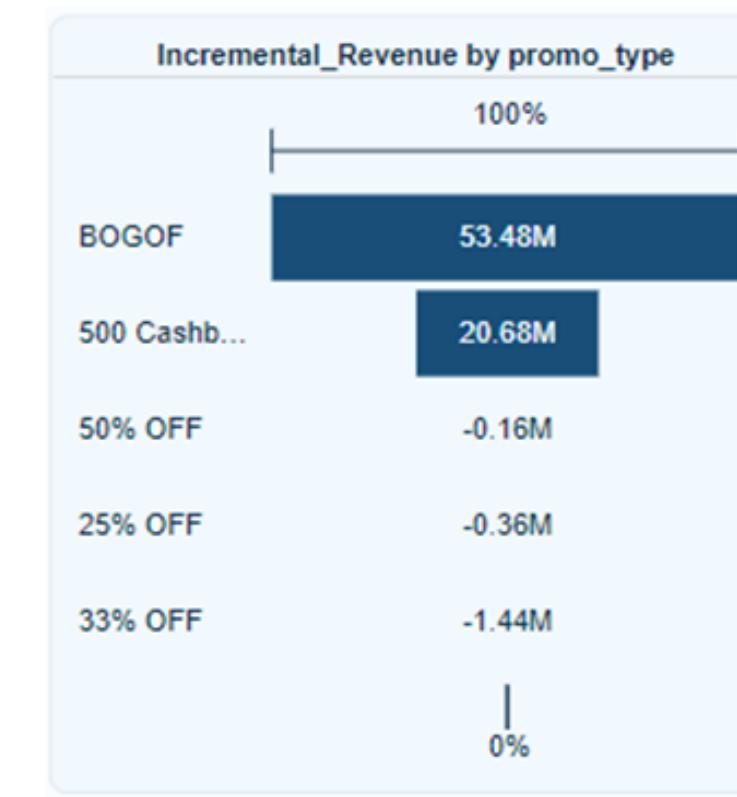
# ADDITIONAL INSIGHTS

During Diwali, the revenue was primarily driven by the 500 cashback promotion, whereas during Sankranti, the BOGOF promotion contributed significantly to the revenue

Diwali



Sankranti



- Consumer preferences and spending patterns during festivals likely drive the variation in promotional effectiveness.
- For instance, consumers may favor receiving a ₹500 cashback on larger items such as home appliances or home care products, while they may prefer BOGOF deals for consumables like groceries and staples.

# KEY INSIGHTS

## Store Performance Analysis:

- Stores located in Tier 1 cities like Bengaluru and Chennai exhibit superior performance, suggesting a correlation between city tier and revenue generation.
- Bengaluru and Chennai have a higher concentration of top-performing stores, indicating potential common characteristics that contribute to their success.
- A higher store count in a city positively impacts revenue generation, highlighting the importance of expanding store presence in lucrative markets.

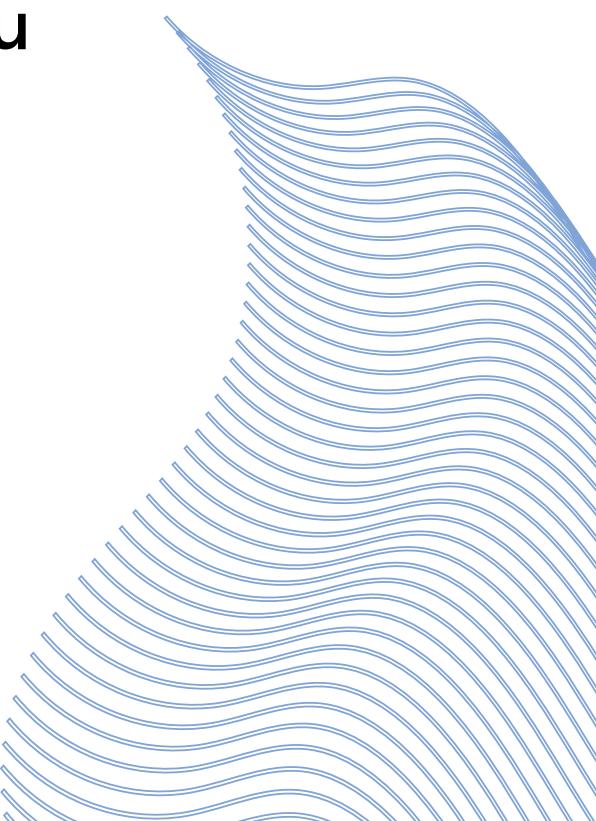
## Promotion Type Analysis:

- Promotion types such as "500 Cashback" and "BOGOF" demonstrate higher effectiveness in driving incremental revenue compared to discount-based promotions like "25% off" and "50% off".
- Cashback promotions strike a balance between Incremental Sold Units and maintaining healthy margins, making them a favorable choice for future promotional strategies.
- BOGOF promotions perform well across various product categories, indicating their versatility and appeal to a wide range of consumers.



# RECOMMENDATIONS

- Tailor promotional offers to align with consumer preferences during specific festivals or seasonal trends, leveraging insights from past campaign performances.
- Explore opportunities to expand market reach beyond Tier 1 cities by identifying emerging markets with growth potential.
- Expand the assortment of combo packs within the personal care category to incentivize purchases and drive category growth.
- Consider transitioning discount-based promotions on personal care products to 50% cashback or BOGOF offers to enhance their appeal and stimulate sales.
- Analyze the operational and marketing strategies of top-performing stores in Bengaluru and Chennai to identify best practices that can be replicated in other locations.



# **THANK YOU!**



**Thankyou for going through the  
presentation.**

**I would like thank Codebasics team for  
providing this dataset and the opportunity  
to grow and improve our skills.**

