



Atliq Supermarket

Sales Insights

(During Festivals)

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AGENDA



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3 | Ad-Hoc Business Requests

2 | Data Walkthrough

4 | Power BI Dashboard & Insights

5 | Recommendation





About Project



- 🎯 AtliQ Mart is a retail giant with over 50 supermarkets in the southern region of India. All 50 stores ran a massive promotion during **Diwali 2023** and **Sankranti 2024** 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.
- 🎯 The primary **objective** is to analyze the performance of promotions during festivals on AtliQ branded products across these supermarkets, determining their success in informed decision-making.

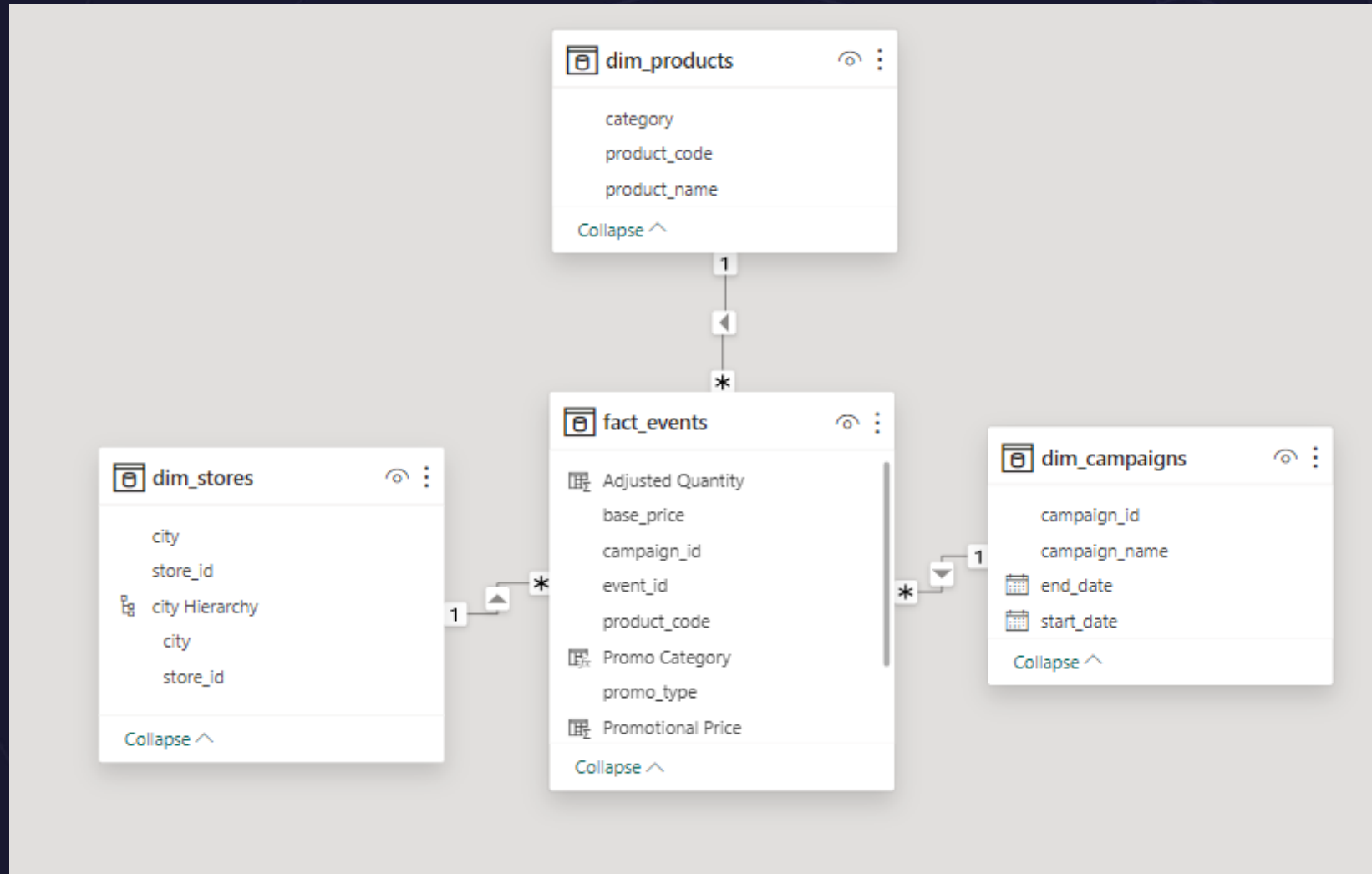




Data Walkthrough



Entity Relationship Diagram



Requirements



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)

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Recommended Insights



Store Performance Analysis:

- Which are the top 10 stores in terms of Incremental Revenue (IR) generated from the promotions?
- Which are the bottom 10 stores when it comes to Incremental Sold Units (ISU) during the promotional period?
- How does the performance of stores vary by city? Are there any common characteristics among the top-performing stores that could be leveraged across other stores?

Promotion Type Analysis:

- What are the top 2 promotion types that resulted in the highest Incremental Revenue?
- What are the bottom 2 promotion types in terms of their impact on Incremental Sold Units?
- Is there a significant difference in the performance of discount-based promotions versus BOGOF (Buy One Get One Free) or cashback promotions?
- Which promotions strike the best balance between Incremental Sold Units and maintaining healthy margins?

Product and Category Analysis:

- Which product categories saw the most significant lift in sales from the promotions?
- Are there specific products that respond exceptionally well or poorly to promotions?
- What is the correlation between product category and promotion type effectiveness?

Note: The above insight ideas are intended to jump-start your analysis. You are encouraged to dig deeper and broaden the scope of your analysis to discover even more valuable findings.

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AD-Hoc Business Requests



Business Request 1



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

MySQL Query:

```
select distinct product_name,base_price,promo_type
from retail_events_db.dim_products p join retail_events_db.fact_events fe
on fe.product_code=p.product_code where
base_price>500 and promo_type="BOGOF";
```

Output :

product_name	base_price	promo_type
Atliq_Double_Bedsheet_set	1190	BOGOF
Atliq_waterproof_Immersion_Rod	1020	BOGOF



Business Request 2

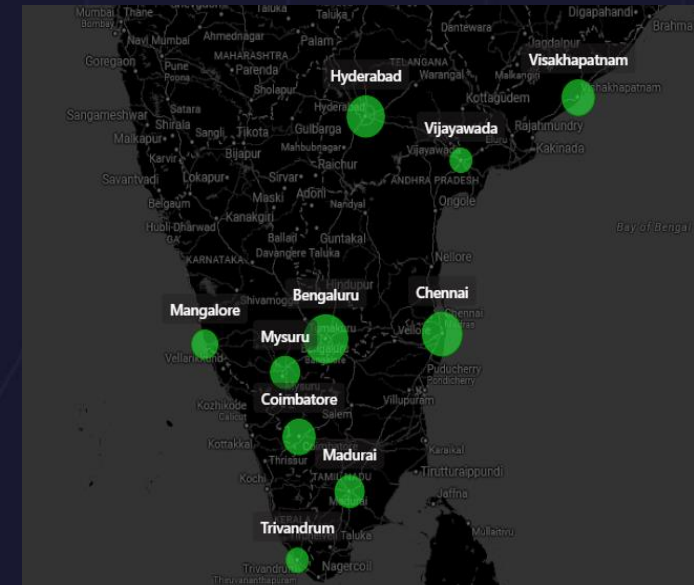
Generate a report that provides an overview of the number of stores in each city. The results will be sorted in descending order of store counts, allowing us to identify the cities with the highest store presence.

MySQL Query:

```
select city,count(store_id) as store_count
from retail_events_db.dim_stores
group by city
order by store_count 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



Business Request 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), and total_revenue (after_promotion).

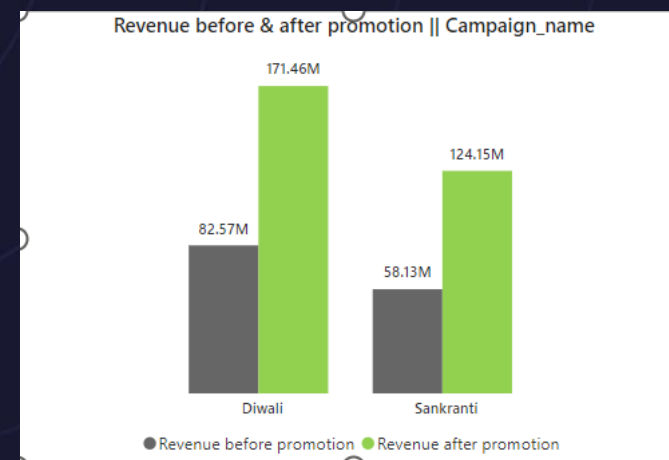
MySQL Query:

```
WITH MY_CTE AS(
SELECT
*,
CASE
WHEN promo_type = "50% OFF" THEN base_price*.5
WHEN promo_type = "25% OFF" THEN base_price*.75
WHEN promo_type = "33% OFF" THEN base_price*.67
WHEN promo_type = "BOGOF" THEN base_price*.5
ELSE base_price-500
END AS Promotional_price
FROM
retail_events_db.fact_events)

select campaign_name,
round(sum(base_price*quantity_sold(before_promo))/100000,2) as 'Total revenue before promotion(M)',
round(sum(Promotional_price*quantity_sold(after_promo))/100000,2) as 'Total revenue after promotion(M)'
from MY_CTE MC join retail_events_db.dim_campaigns c
on c.campaign_id=MC.campaign_id
group by campaign_name
order by 'Total revenue before promotion(M)', 'Total revenue after promotion(M)' desc ;
```

Output :

campaign	Rev before promotion(M)	Rev after promotion(M)
Sankranti	58.13	124.15
Diwali	82.57	171.46



Business Request 4



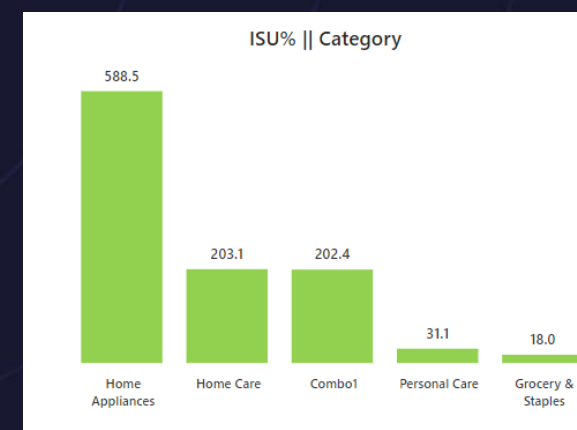
Produce a report that calculates the Incremental Sold Quantity (ISU%) for each category during the Diwali campaign. Additionally, provide rankings for the categories based on their ISU%. The report will include three key fields: category, isu%, and rank order.

MySQL Query:

```
WITH MYT_CTE AS (
    SELECT
        *,
        CASE
            WHEN promo_type = 'BOGOF' THEN `quantity_sold(after_promo)` * 2
            ELSE `quantity_sold(after_promo)`
        END AS AdjustedQuantity
    FROM
        retail_events_db.fact_events
),
Ranked_CTE AS (
    SELECT
        category,
        ROUND((SUM(AdjustedQuantity) - SUM(`quantity_sold(before_promo)`)) * 100 / SUM(`quantity_sold(before_promo)`), 1)
        AS incremental_sold_quantity FROM MYT_CTE
    JOIN retail_events_db.dim_products AS p ON p.product_code = MYT_CTE.product_code
    WHERE campaign_id = 'CAMP_DIW_01'
    GROUP BY category
)
SELECT
    *,
    RANK() OVER(ORDER BY incremental_sold_quantity DESC) AS rank_order
FROM Ranked_CTE;
```

Output :

category	ISU%	rank_order
Home Appliances	588.5	1
Home Care	203.1	2
Combo1	202.4	3
Personal Care	31.1	4
Grocery & Staples	18	5



Business Request 5



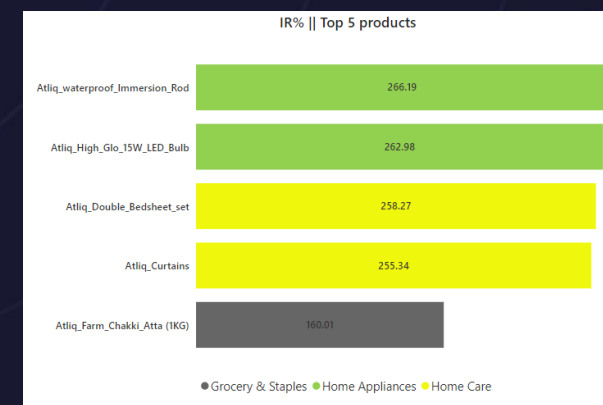
Create a report featuring the Top 5 products, ranked by Incremental Revenue Percentage (IR%), across all campaigns. The report will provide essential information including product name, category, and ir%. This analysis helps identify the most successful products in terms of incremental revenue across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

MySQL Query:

```
WITH MY_CTE AS (
  SELECT *,
    CASE
      WHEN promo_type = "50% OFF" THEN base_price * 0.5
      WHEN promo_type = "25% OFF" THEN base_price * 0.75
      WHEN promo_type = "33% OFF" THEN base_price * 0.67
      WHEN promo_type = "BOGOF" THEN base_price * 0.5
      ELSE base_price - 500
    END AS Promotional_price,
    CASE
      WHEN promo_type = 'BOGOF' THEN `quantity_sold(after_promo)` * 2
      ELSE `quantity_sold(after_promo)`
    END AS AdjustedQuantity
  FROM retail_events_db.fact_events
)
SELECT product_name, category,
  ROUND(
    (SUM(Promotional_price * AdjustedQuantity) - SUM(base_price * `quantity_sold(before_promo)`))*100
    / SUM(base_price * `quantity_sold(before_promo)`),2) AS revenue_change
  FROM MY_CTE MC
  JOIN retail_events_db.dim_products p ON p.product_code = MC.product_code
  GROUP BY product_name,category
  ORDER BY revenue_change DESC
  limit 5;
```

Output :

product	category	IR%
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_Farm_Chakki_Atta (1KG)	Grocery & Staples	160.01





Power BI Dashboard





Analysis of Trends at Atliq Supermarket Stores During Promotions



Filters

City

All

Campaign

All

Category

All



154.9M

Incremental Revenue

110

Incremental Revenue %

442K

Incremental Sold Units

211

Incremental Sold Units %

STMYS-1

MostSellingShop

STMLR-0

LeastSellingShop

Top 10 Store || Incremental Revenue

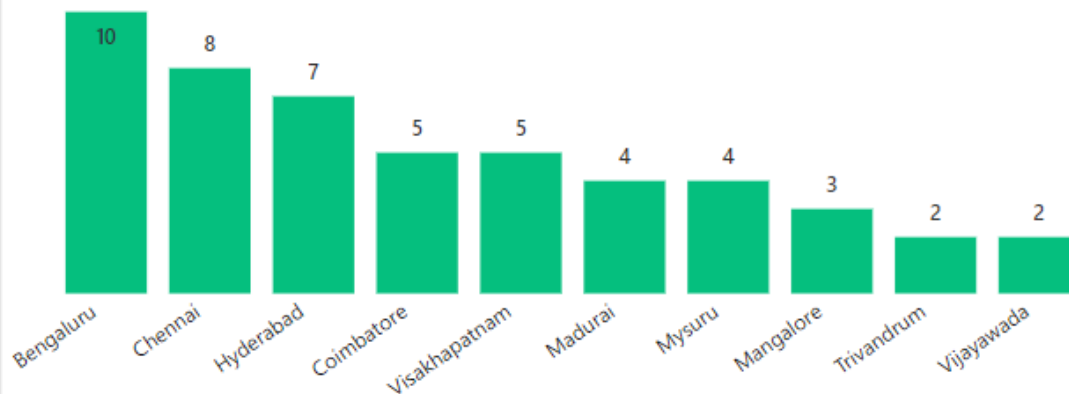


Bottom 10 Store || Incremental sold Units



city	IR	IR%	ISU	ISU%
Bengaluru	38M	116	108162	220
Chennai	31M	117	86125	218
Hyderabad	23M	100	68763	200
Mysuru	14M	107	36102	194
Coimbatore	14M	111	40598	224
Madurai	12M	120	32548	225
Visakhapatnam	11M	94	32995	192
Mangalore	5M	99	14833	197
Vijayawada	4M	113	11172	211
Trivandrum	3M	109	10378	215

Store Count || city



Retail Events. STORE PERFORMANCE ANALYSIS

Data updated on 4/3/24, 11:41 pm





Analysis of Promotions at Atliq Supermarket Stores



Filters

City

All

Campaign

All

Category

All



154.9M

Incremental Revenue

110

Incremental Revenue %

442K

Incremental Sold Units

211

Incremental Sold Units %

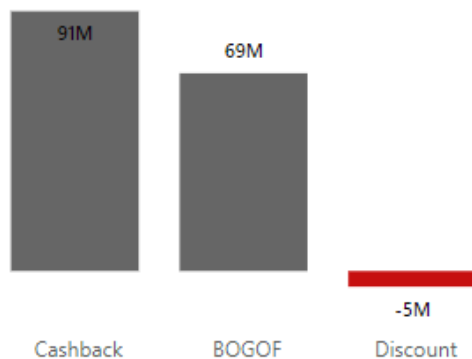
500 Cashback

MostSellingPromo

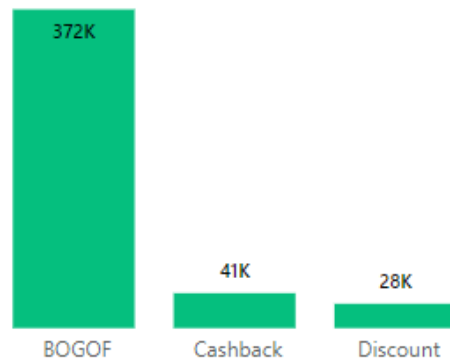
25% OFF

LeastSellingPromo

Incremental Revenue || promo_type



ISU || promo_type



Bottom 2 promo || ISU



Top 2 promo || Incremental Revenue



Incremental Revenue, Incremental Sold Units || Promo

Promo Category	Promo	IR	IR%	ISU	ISU%
Cashback	500 Cashback	91,053K	▲ 136	40881	◆ 183
BOGOF	BOGOF	69,317K	● 267	372326	● 640
Discount	50% OFF	-727K	◆ -34	6931	◆ 33
Discount	33% OFF	-1,563K	◆ -4	27255	◆ 43
Discount	25% OFF	-3,175K	◆ -35	-5717	◆ -13





Analysis of Products & Category at Atliq Supermarket Stores



Filters

City

All

Campaign

All

Promo

All



154.9M

Incremental Revenue

110

Incremental Revenue %

442K

Incremental Sold Units

211

Incremental Sold Units %

Atliq_Sonamasuri_Rice (10KG)

LeastSellingProduct

Atliq_Home_Essential_8_Product_Combo

MostSellingProduct

IR, IR% || Product

Product	IR	IR%
Atliq_Home_Essential_8_Product_Combo	91,053K	▲ 136
Atliq_waterproof_Immersion_Rod	17,561K	● 266
Atliq_Farm_Chakki_Atta (1KG)	17,363K	▲ 160
Atliq_Double_Bedsheet_set	12,917K	● 258
Atliq_Suflower_Oil (1L)	8,193K	▲ 146
Atliq_High_Glo_15W_LED_Bulb	7,589K	● 263
Atliq_Curtains	3,518K	● 255
Atliq_Scrub_Sponge_For_Dishwash	-111K	◆ -35
Atliq_Cream_Beauty_Bathing_Soap (125GM)	-138K	◆ -35
Atliq_Lime_Cool_Bathing_Bar (125GM)	-160K	◆ -33
Atliq_Masoor_Dal (1KG)	-176K	◆ -4
Atliq_Body_Milk_Nourishing_Lotion (120ML)	-216K	◆ -36
Atliq_Doodh_Kesar_Body_Lotion (200ML)	-332K	◆ -33
Atliq_Fusion_Container_Set_of_3	-769K	◆ -36
Atliq_Sonamasuri_Rice (10KG)	-1,388K	◆ -4

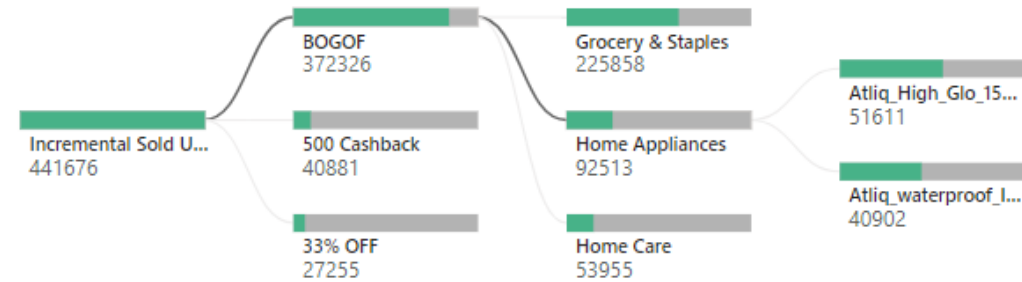
promo_type

BOGOF

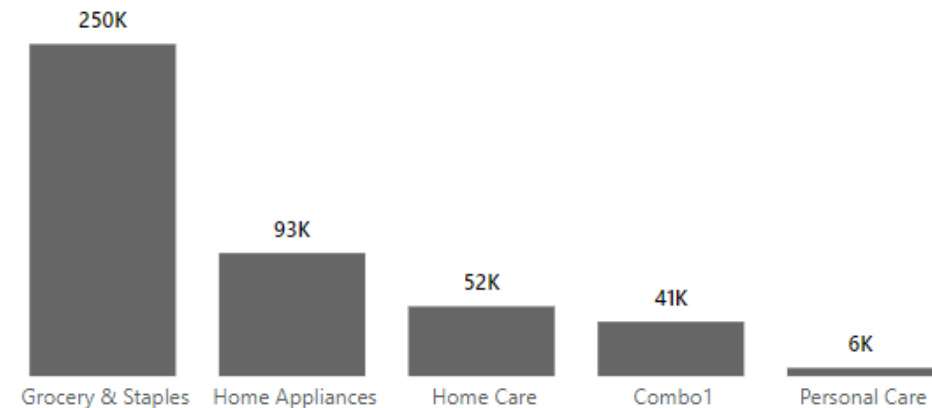
category

Home Appliances

product_name



ISU || category



Retail Events, CATEGORY & PRODUCT ANALYSIS

Data updated on 4/3/24, 11:41 pm

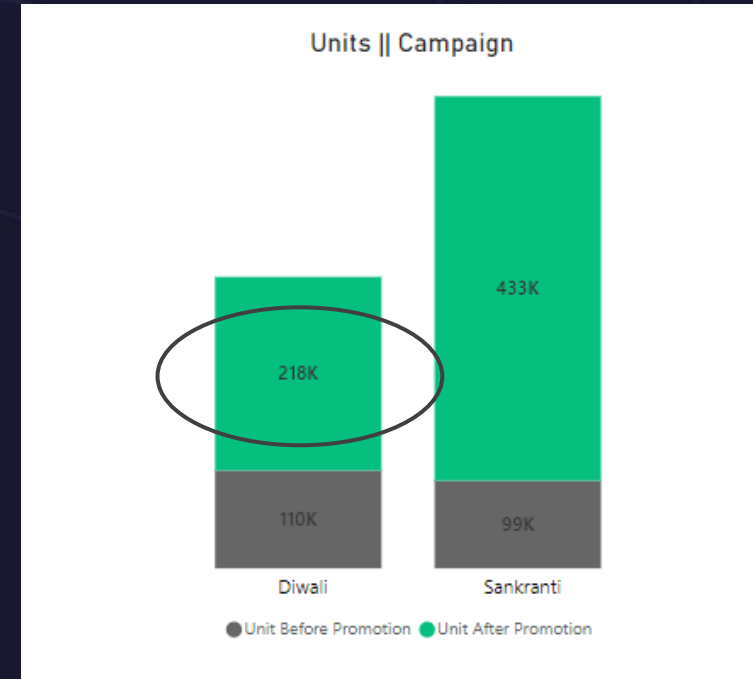
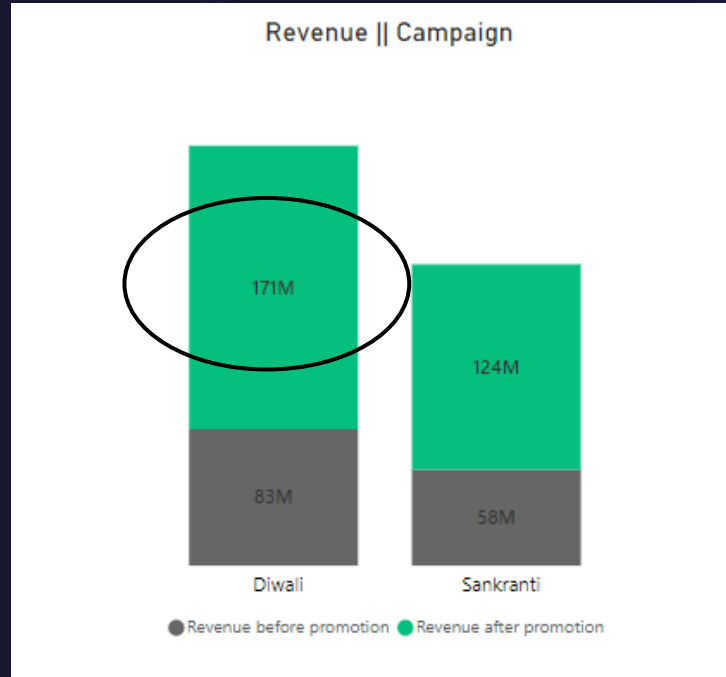




Power BI Dashboard Insights



Best Campaign During Promotions:



Possible Reasons:

Observing the data, a notable surge in revenue is evident during the **Diwali campaign**, despite a decrease in the number of units sold. Conversely, during the **Sankranti campaign**, there was a higher volume of units sold, yet the revenue generated was comparatively lower. This phenomenon could be attributed to various factors, including **price differentials, higher-priced products, the efficacy of promotional strategies, and the cultural significance** associated with each festival.



Best Performing promo During Campaigns:



In Diwali :

campaign	Promo Cat	Promo	IR	IR%	ISU	ISU%
Diwali	Cashback	500 Cashback	76,550K	152	33978	202
Diwali	BOGOF	BOGOF	15,842K	244	58898	588
Diwali	Discount	33% OFF	-125K	-1	13965	48
Diwali	Discount	50% OFF	-566K	-35	5231	31
Diwali	Discount	25% OFF	-2,814K	-34	-4526	-12

In Sankranti :

campaign	Promo Cat	Promo	IR	IR%	ISU	ISU%
Sankranti	BOGOF	BOGOF	53,475K	275	313428	651
Sankranti	Cashback	500 Cashback	14,504K	88	6903	125
Sankranti	Discount	50% OFF	-161K	-31	1700	39
Sankranti	Discount	25% OFF	-360K	-39	-1191	-18
Sankranti	Discount	33% OFF	-1,438K	-7	13290	39

Possible Reasons:

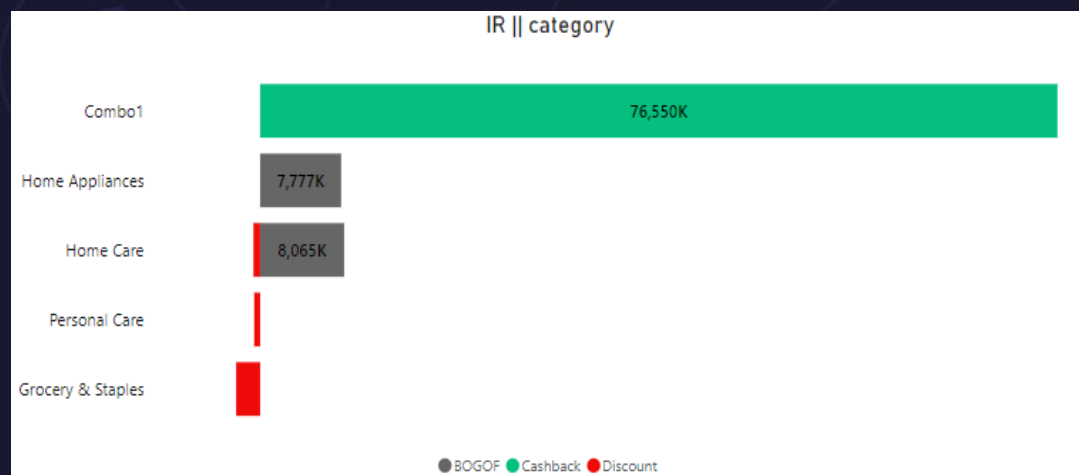
During the **Diwali Campaign**, the **500 cashback promo** brought in 76.5M more revenue, with **BOGOF** adding 16M. In the **Sankranti Campaign**, **BOGOF** led to 53M more revenue, while the **500 cashback** brought in 14.5 M. However, discount promos lowered revenue in both campaigns, explaining the revenue surge during Diwali despite fewer units sold and the lower revenue during Sankranti despite higher unit sales.



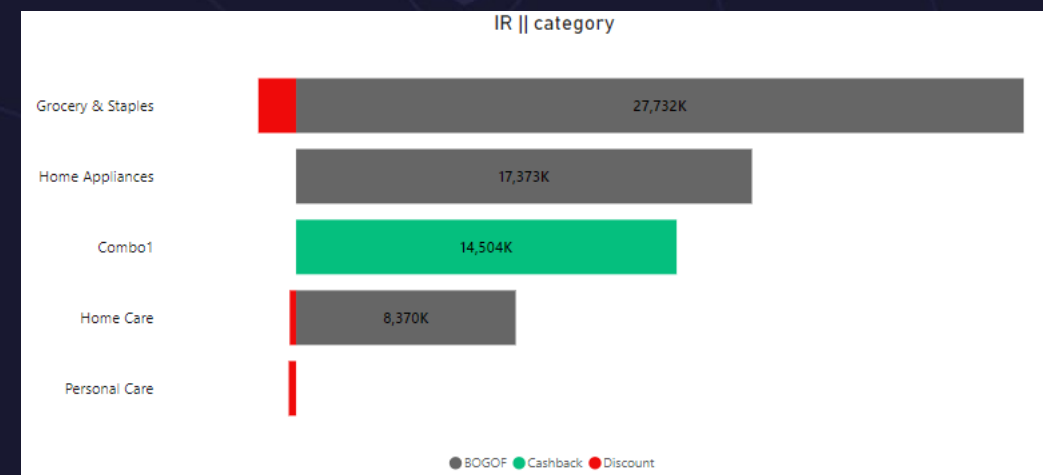
Best Performing Category During Campaigns:



In Diwali :



In Sankranti :



Possible Reasons:

During the **Diwali Campaign**, **Combo1** witnessed a significant revenue increase of 76M, while **Home Appliances** & **Home Care** added 15M more. In the **Sankranti Campaign**, revenue increments were observed in **Grocery & Staples** (27M), **Home Appliances** (17M), and **Combo1** (14M). These trends align with festival-specific consumer behaviors, such as the tradition of gifting during **Diwali** driving sales in **Combo1**. Similarly, during the **Sankranti Campaign**, traditional feasting boosted sales in **Grocery & Staples**, while home-related purchases and festival-tailored combo offers drove revenue in **Home Appliances** and **Combo1** categories, respectively. During both campaigns, **Personal Care** products showed lower performance.



Best Performing Products During Campaigns



In Diwali :

Product	category	promo	base_price	Promotional_price	IR
Atliq_Home_Essential_8_Product_Combo	Combo1	500 Cashback	3000	2500	76,550K
Atliq_Double_Bedsheet_set	Home Care	BOGOF	1190	595	6,105K
Atliq_waterproof_Immersion_Rod	Home Appliances	BOGOF	1020	510	5,034K
Atliq_High_Glo_15W_LED_Bulb	Home Appliances	BOGOF	350	175	2,743K
Atliq_Curtains	Home Care	BOGOF	300	150	1,960K
Atliq_Masoor_Dal (1KG)	Grocery & Staples	33% OFF	172	115	-25K
Atliq_Scrub_Sponge_For_Dishwash	Home Care	25% OFF	55	41	-88K
Atliq_Sonamasuri_Rice (10KG)	Grocery & Staples	33% OFF	860	576	-100K
Atliq_Cream_Beauty_Bathing_Soap (125GM)	Personal Care	50% OFF	65	33	-110K
Atliq_Lime_Cool_Bathing_Bar (125GM)	Personal Care	50% OFF	62	31	-113K
Atliq_Body_Milk_Nourishing_Lotion (120ML)	Personal Care	50% OFF	110	55	-125K
Atliq_Doodh_Kesar_Body_Lotion (200ML)	Personal Care	50% OFF	190	95	-217K
Atliq_Fusion_Container_Set_of_3	Home Care	25% OFF	415	311	-551K
Atliq_Sunflower_Oil (1L)	Grocery & Staples	25% OFF	156	117	-793K
Atliq_Farm_Chakki_Atta (1KG)	Grocery & Staples	25% OFF	290	218	-1,383K

In Sankranti :

Product	category	promo	base_price	Promotional_price	IR
Atliq_Farm_Chakki_Atta (1KG)	Grocery & Staples	BOGOF	370	185	18,746K
Atliq_Home_Essential_8_Product_Combo	Combo1	500 Cashback	3000	2500	14,504K
Atliq_waterproof_Immersion_Rod	Home Appliances	BOGOF	1020	510	12,528K
Atliq_Sunflower_Oil (1L)	Grocery & Staples	BOGOF	200	100	8,986K
Atliq_Double_Bedsheet_set	Home Care	BOGOF	1190	595	6,813K
Atliq_High_Glo_15W_LED_Bulb	Home Appliances	BOGOF	350	175	4,846K
Atliq_Curtains	Home Care	BOGOF	300	150	1,557K
Atliq_Scrub_Sponge_For_Dishwash	Home Care	25% OFF	55	41	-24K
Atliq_Cream_Beauty_Bathing_Soap (125GM)	Personal Care	25% OFF	50	38	-27K
Atliq_Lime_Cool_Bathing_Bar (125GM)	Personal Care	50% OFF	62	31	-46K
Atliq_Body_Milk_Nourishing_Lotion (120ML)	Personal Care	25% OFF	90	68	-91K
Atliq_Doodh_Kesar_Body_Lotion (200ML)	Personal Care	50% OFF	190	95	-114K
Atliq_Masoor_Dal (1KG)	Grocery & Staples	33% OFF	172	115	-150K
Atliq_Fusion_Container_Set_of_3	Home Care	25% OFF	415	311	-218K
Atliq_Sonamasuri_Rice (10KG)	Grocery & Staples	33% OFF	860	576	-1,288K

Possible Reasons

During **Diwali**, the Atliq Home Essential 8 product combo, priced at 2500 (after promotion), led to a significant 76M revenue increase. Double Bedsheet Set and Atliq waterproof immersion rod, priced at 595 and 510 respectively (after the **BOGOF** promotion), added 13M more. In the **Sankranti Campaign**, revenue rose with Atliq Farm Chakki Atta, priced at 185 (after the **BOGOF** promotion), seeing an 18M increase. Atliq Home Essential 8 product combo, priced at 2500 (after the Cashback promotion), experienced a 14M revenue boost. These trends align with the **pricing & festival-specific consumer behaviors**, such as the tradition of gifting during **Diwali & Sankranti Campaign** driving sales in **Combo1, Grocery & Staples**, while home-related purchases and festival-tailored combo offers drove revenue in Home Appliances and Combo1 categories, respectively.



RECOMMENDATIONS



1. **Offer More Bundles:** Expand bundle options across different product categories to attract customers looking for bundled deals.
2. **Use BOGOF and Cashback:** Stick with BOGOF and cashback offers as they work well. Try variations like "Buy One Get One at a Discount" or "Cashback on Repeat Purchases" to keep customers engaged.
3. **Rethink Discounts:** Since discounts haven't been effective, try alternatives like gift with purchase or loyalty rewards to add value.
4. **Promote BOGOF and Cashback:** Advertise BOGOF and cashback offers through social media, emails, and in-store displays to highlight the savings and encourage purchases.
5. **Tailor Promotions:** Customize promotions for specific campaigns, like Diwali and Sankranti, with themed deals and contests that resonate with customers.
6. **In-store Experience:** Enhance the in-store experience for customers by creating attractive displays, providing product samples or demonstrations for Personal Care products, and offering personalized recommendations based on individual needs.





Dear **Dhaval Patel, Hemanand Vadivel Sir**, and the Entire **CODEBASICS** Team,

I wanted to express my heartfelt gratitude for organizing the Resume Challenge 9. It was an incredible opportunity to enhance my resume-building skills and engage with the coding community. Your dedication to fostering learning and growth is truly appreciated. Thank you for your hard work and support!





Thank You

