AtliQ Mart

Sales and Promotion Analysis.

Presented by:

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Problem Statement.

AtliQ Mart is a retail giant, and operates over 50 supermarkets in the southern region of India.

Company has ran a massive promotion during Festive time (i.e. Diwali 2023 and Sankranti 2024) on their AtilQ brand products.

Now we want to understand which promotion performed well and which did not, and this will help in making decisions for the next promotional period.

AD – HOC Business Requests.

Business Request - 1

```sql
select p.product_code, p.product_name, f.promo_type, max(f.base_price) as total_base_price from retail_events_db.fact_events as f
inner join retail_events_db.dim_products as p
on f.product_code = p.product_code
where base_price > 500 and promo_type = 'BOGOF' and p.product_code IS NOT NULL
group by product_code, product_name, promo_type
order by p.product_name
```

product_code	product_name	promo_type	total_base_price
P08	Atliq_Double_Bedsheet_set	BOGOF	1190
P14	Atliq_waterproof_Immersion_Rod	BOGOF	1020

Atliq double bedsheet at ₹ 1190 and Atliq waterproof immersion rod at ₹1020 are the high valued products offered at heavy discounts through "BOGOF" Promotion.

Business Request - 2

```sql
select city, count(*) as Store_count from retail_events_db.dim_stores
group by city
order by count(*) desc
```

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

Number of stores in each city.

Bengaluru, Chennai, and Hyderabad cities has the maximum stores.

Mangalore, Trivandrum, and Vijayawada cities has the least number of stores.

Business Request - 3

```sql
select
    c.campaign_name,
    SUM( e.base_price * e.quantity_sold_before_promo) AS total_revenue_before_promotion,
    SUM(e.base_price * e.quantity_sold_after_promo) AS total_revenue_after_promotion
from retail_events_db.dim_campaigns as c
join retail_events_db.fact_events as e
on e.campaign_id = c.campaign_id
group by campaign_name
```

	campaign_name	total_revenue_before_promotion	total_revenue_after_promotion
▶	Sankranti	58127429	140403941
	Diwali	82573759	207456209

Result Grid | Filter Rows: | Export: | Wrap Cell Content: ᴵA

During Sankranti campaign, total revenue has increased from 58M to 140M after promotions i.e. 141% boost in revenue.

During Diwali Campaign the revenue has increased from 82M to 207M after promotions, there has been 152% boost in revenue.

Business Request - 4

```sql
select category,
concat(round(((sum(quantity_sold_after_promo)-sum(quantity_sold_before_promo))/sum(quantity_sold_before_promo))*100,2),"%") as Incremental_Sold_Quantity,
rank() over(order by ((sum(quantity_sold_after_promo)-sum(quantity_sold_before_promo))/(sum(quantity_sold_before_promo))) desc) as rank_order
from retail_events_db.fact_events as e
inner join retail_events_db.dim_products as p
on e.product_code = p.product_code
join retail_events_db.dim_campaigns as c
on c.campaign_id = e.campaign_id
where campaign_name ="Diwali"
group by category
order by rank_order;
```

category	Incremental_Sold_Quantity	rank_order
Home Appliances	244.23%	1
Combo1	202.36%	2
Home Care	79.63%	3
Personal Care	31.06%	4
Grocery & Staples	18.05%	5

ISU% helps in measuring the change in items sold after promotions.

During Diwali campaign, Home Appliances has seen 244.23% increase on sales and followed by other categories.

Business Request - 5

```sql
select product_name, category,
round(((sum(base_price * quantity_sold_after_promo) - sum(base_price * quantity_sold_before_promo))/ sum(base_price * quantity_sold_before_promo))*100,2) as IRP
from retail_events_db.fact_events as e
inner join retail_events_db.dim_products as p
on e.product_code = p.product_code
inner join retail_events_db.dim_campaigns as c
on e.campaign_id = c.campaign_id
group by product_name, category
order by IRP DESC
limit 5
```

product_name	category	IRP
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	183.33

IR% indicates Incremental Revenue Percentage, after promotions.

Products like Waterproof Immersion Rod, and Bulb in Home Appliances category has seen 266.19% increase in revenue after both campaigns followed by others.

Dashboard

Super Market Performance

Diwali | **Sankranti**

Category: All

Promotion Type: All

Total Revenue	Total Sales
488.56M	644.52K

Sum of Revenue before promotion	Sum of Revenue after promotion
140.70M	347.86M

Total Revenue by city

City	Total Revenue
Bengaluru	117M
Chennai	93M
Hyderabad	76M
Mysuru	45M
Coimbatore	43M
Visakhapatnam	38M
Madurai	37M
Mangalore	17M
Vijayawada	13M
Trivandrum	11M
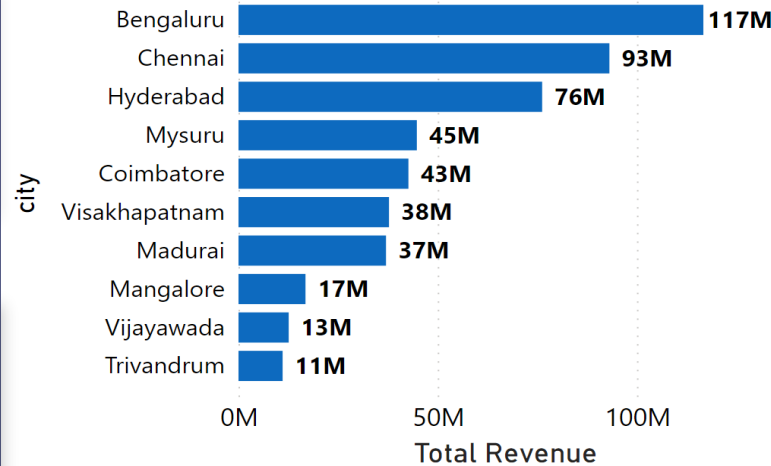
store_id	Total Sales	Total Revenue	IR%
STCHE-7	16532	12514878	184.14%
STBLR-7	16873	12834953	182.54%
STMYS-1	16684	13525527	182.15%
STMDU-0	11896	10209155	181.15%
STBLR-0	16363	12961036	181.09%
STCBE-2	12110	8728096	180.91%
STCHE-4	16641	13431431	177.62%
STMYS-3	14382	12168012	177.53%
STCHE-3	15811	12153537	177.07%
STBLR-6	16629	12816373	176.51%
Total	**153921**	**121342998**	**180.02%**

store_id	Total Sales	Total Revenue	ISU%
STVSK-3	8887	6918461	66.16%
STHYD-1	12773	9427792	66.49%
STCHE-1	13015	9296896	67.41%
STVSK-4	9477	7390275	70.46%
STMYS-2	12639	10585471	73.93%
STMYS-0	12334	8469041	74.39%
STMLR-0	7026	5014869	76.94%
STBLR-1	13428	9961144	78.07%
STCBE-4	10271	7833096	79.71%
STHYD-3	13989	10646836	80.51%
Total	**113839**	**85543881**	**73.41%**

Total count of stores by city

City	Count of store_id
Bengaluru	300
Chennai	240
Hyderabad	210
Coimbatore	150
Visakhapatnam	150
Madurai	120
Mysuru	120
Mangalore	90
Trivandrum	60
Vijayawada	60
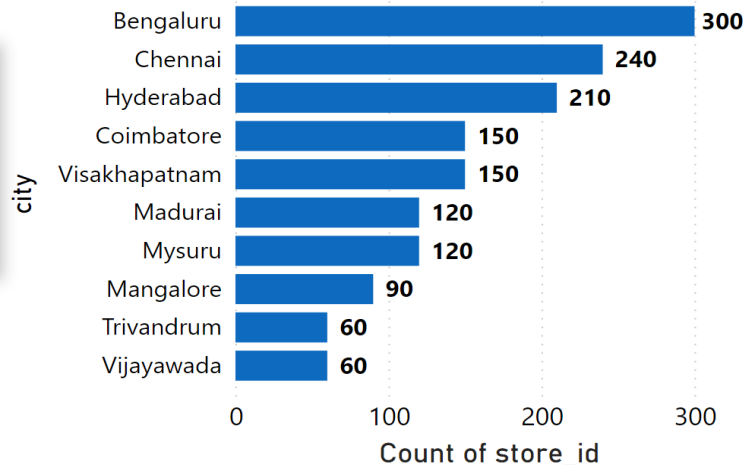
Total Sales by city
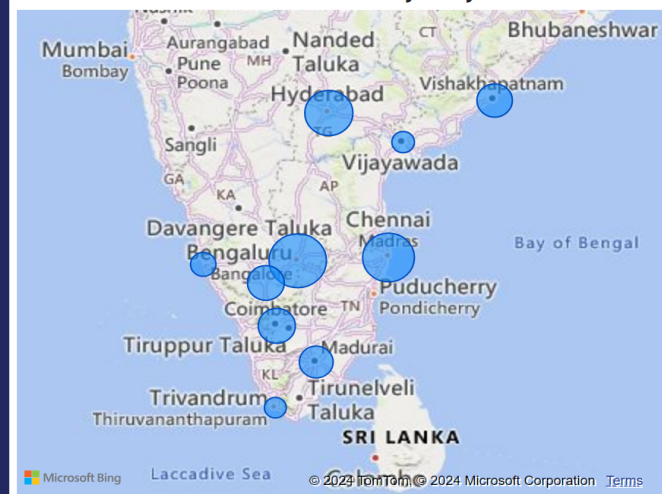
Revenue by Each Category

Category	Total Revenue
Combo1	256M
Grocery & Staples	149M
Home Appliances	44M
Home Care	34M
Personal Care	6M
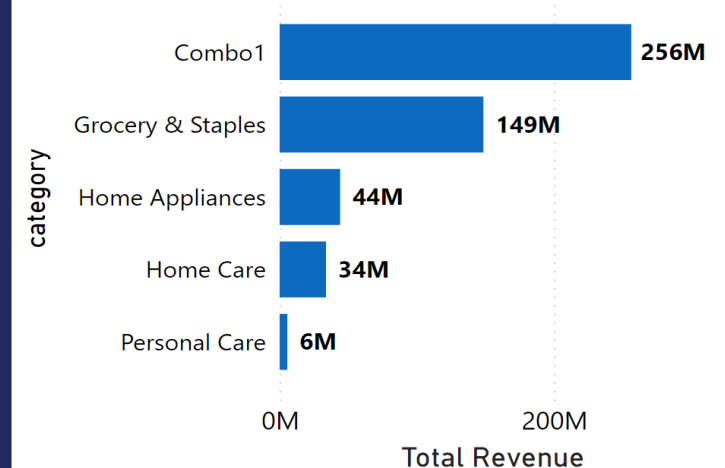
Store Performance Insights

➢ Bengaluru, Chennai and Hyderabad cities has the highest Revenue and Trivandrum city has least revenue. Bengaluru alone generates 177M revenue.

➢ Bengaluru, Chennai and Hyderabad cities has highest number in both stores and sales quantity.

➢ Stores id STCHE-7, STBLR-7, and STMYS-1 from Chennai, Bengaluru, and Mysore are showing significant incremental revenue.

➢ Stores id of STVSK-3, STHYD-1, and STCHE-1 from Visakhapatnam, Hyderabad, and Chennai are not performing well in sales. The ISU% is very less when compared to other stores.

➢ Combo1 and Grocery & staples category are generating good revenue.

Promotion Analysis

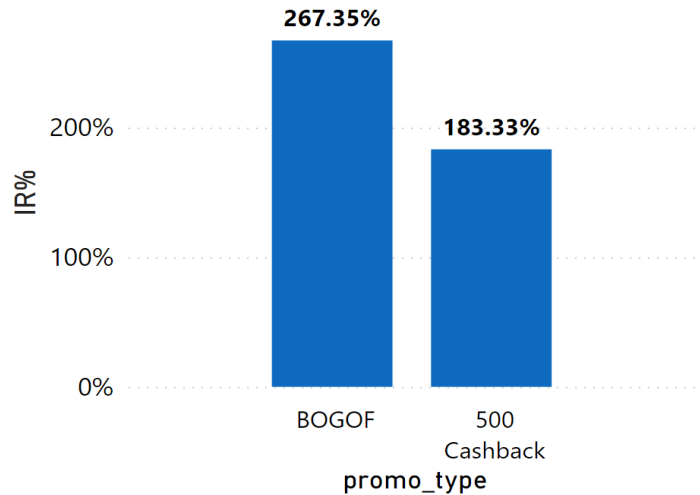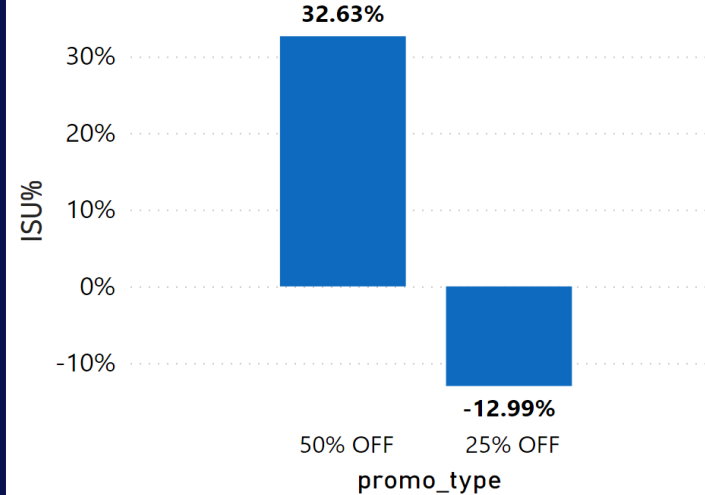| Total Revenue	Total Sales	IR%	ISU%
488.56M	644.52K	147.23%	108.31%

Category
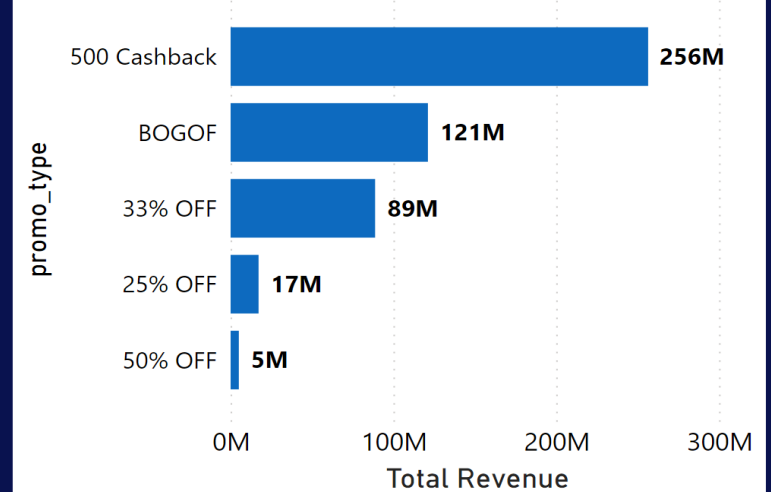All

Promotion Type
All

Top 2 Highest Promotion by IR%

Bottom 2 Promotion type impacting ISU%

Total Revenue earned by Promotions

Promotions	Total Revenue before promo	Total Revenue after promo	Revenue% (before promo)	Revenue% (after promo)	Total Sales	Total_sales% (before promo)	Total_sales% (after promo)	IR%	ISU%
Buy One Get One Free Promotions	26M	95M	21.40%	78.60%	273K	21.28%	78.72%	267.35%	269.98%
Cashback Promotion	67M	190M	26.09%	73.91%	85K	26.09%	73.91%	183.33%	183.33%
Discounts promotion	48M	63M	43.15%	56.85%	286K	45.02%	54.98%	31.75%	22.14%
Total	**141M**	**348M**	**28.80%**	**71.20%**	**645K**	**32.43%**	**67.57%**	**147.23%**	**108.31%**

Promotion Insights

➢ "BOGOF" with 267.35% and "500 cashback" with 183.33% are the two promotion types that lead highest Incremental Revenue.

➢ "50% off" is the bottom promotion type i.e. impacting positively with 32.63% but 25% off promo type is impacting negatively with -12.99% in ISU%.

➢ "BOGOF" promo type has highest IR% (267.35%) and ISU% (269.98%). There is significant increase in sales and revenue after promotions during Diwali and Sankranti.

➢ "500 Cashback" and "BOGOF" promotions has earned highest revenue of 256M and 121M respectively and "50% off" promo type has generated least revenue of ₹ 5M.

Product & Category Analysis

Total Revenue	Total Sales	IR%	ISU%
488.56M	644.52K	147.23%	108.31%

Category All

Promotion Type All

Products Sales before and after Promotion.

● Total_quantity_sold(after promo) ● Total_quantity_Sold(before_promo)

Product	after promo	before promo
Atliq_Farm_Chakki_Atta (1KG)	81K	32K
Atliq_Suflower_Oil (1L)	74K	31K
Atliq_Home_Essential_8_Product_Combo	63K	22K
Atliq_Sonamasuri_Rice (10KG)	53K	37K
Atliq_Masoor_Dal (1KG)	37K	26K
Atliq_High_Glo_15W_LED_Bulb	30K	8K
Atliq_waterproof_Immersion_Rod	24K	6K
Atliq_Curtains	16K	...
Atliq_Double_Bedsheet_set	15K	...
Atliq_Lime_Cool_Bathing_Bar (125GM)	10K	8K
Atliq_Cream_Beauty_Bathing_Soap (125...	8K	6K
Atliq_Doodh_Kesar_Body_Lotion (200ML)	7K	...
Atliq_Body_Milk_Nourishing_Lotion (12...	7K	6K
Atliq_Scrub_Sponge_For_Dishwash	...	...
Atliq_Fusion_Container_Set_of_3	...	...

0K   20K   40K   60K   80K

Product Category by Sales

● Sum of quantity_sold(after_promo) ● Sum of quantity_sold(before_promo)

category	after_promo	before_promo
Grocery & Staples	246K	127K
Combo1	63K	22K
Home Appliances	54K	15K
Home Care	41K	20K
Personal Care	32K	25K
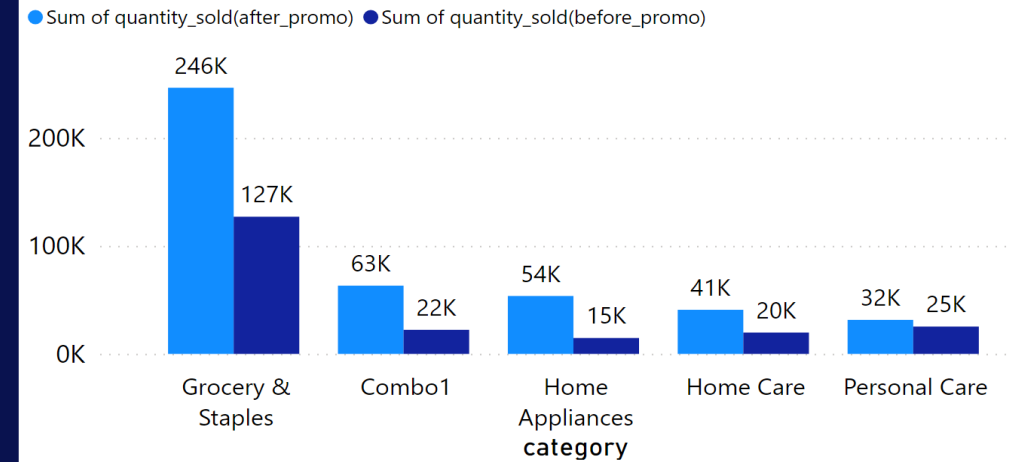
Correlation b/w Product Category & Promotions.

● Buy One Get One Free Promotions ● Cashback Promotion ● Discounts promotion

category: Grocery & Staples, Home Appliances, Home Care, Combo1, Personal Care
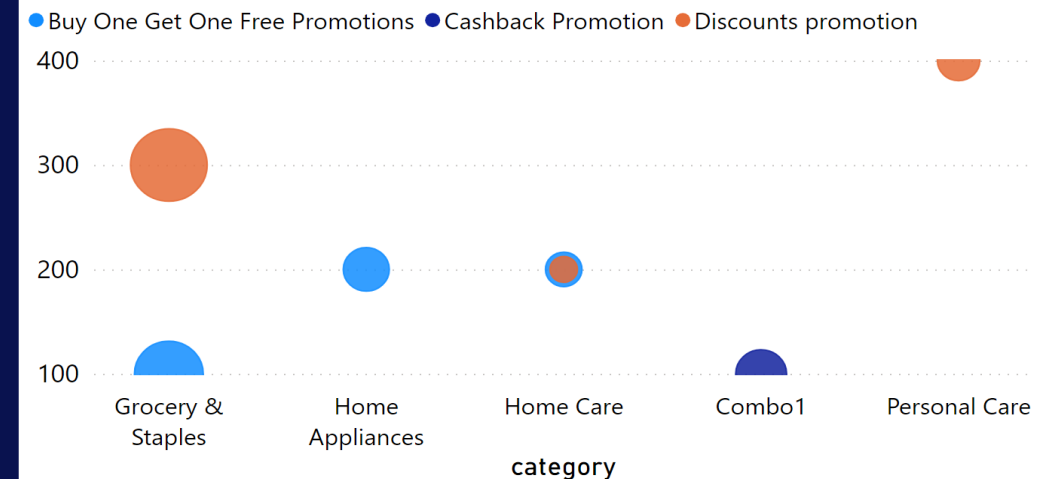
Product and Category Insights

➢ Farm Chakki Atta, Sunflower oil, Home Essential 8 product combo, Sonamasuri Dal, Masoor Dal, High Glo 15W Led bulb, Waterproof immersion rod, curtains, Double bedsheet sets, etc are the products that has seen significant increase in sales after both campaigns Promotions.

➢ In category wise Grocery & staples and Combo 1 has the highest number of sales i.e. 93% and 186% increase in sales quantity after promotions.

➢ Personal Care products category doesn't have much difference in sales i.e. between before promotions and after promotions.

Key Performance Insights

Total Revenue : 488.56M
Total Sales : 644.52K

Total Revenue Before Promotion: 140.70M
Total Revenue After Promotion: 347.86M

Diwali Campaign:

Total Revenue : 290.03M
Total Sales : 293.72K

Total Revenue Before Promotion: 82.57M
Total Revenue After Promotion: 207.46M

IR% : 151.24%
ISU%: 66.25%

Sankranti Campaign:

Total Revenue : 198.53 M
Total Sales : 350.80 K

Total Revenue Before Promotion: 58.13 M
Total Revenue After Promotion: 140.40 M

IR% : 141.55%
ISU%: 155.31%

➢ Both campaigns has significantly boosted sales and revenue after promotions. Diwali revenue has increased to 151% and Sankranti revenue to 141%.

➢ Diwali has highest increase in revenue after promotions.

Recommendations

➢ Expand stores in the Mangalore, Trivandrum, and Vijayawada as they have very less stores when compared to top cities like Bengaluru, Chennai and Hyderabad.

➢ These cities has very less sales and hence it impacting on the revenue generated.

➢ Focus on investing on various promotions during festival season, as they have clearly shown increase in revenue and sales quantity.

➢ Discount promotion types are not performing good as there IR% and ISU% are very less. Uncover the reason behind these promo types to avoid mistakes and gain success in future campaigns.

➢ Focus on selling the high-value products to boost sales and attract customers.

➢ Even though Grocery & staples, combo 1, Home care and Home appliances category products are sold well but focus on Grocery & staples as they have consistently positive in sales.

Thank You