

Project Objective

This project is all about understanding Zepto's product and inventory data using SQL. I wanted to explore what's in stock, how products are priced, what kind of discounts are given, and which items/categories bring the most value or revenue.

By analyzing this dataset, the goal was to extract key metrics (KPIs), find patterns in product performance, and generate insights that could actually help improve inventory management, discount strategy, and overall business decisions.

Project Goals

- Estimate potential revenue from current inventory
- Identify stock issues (especially out-of-stock products)
- Evaluate how discounts are being used across products and categories
- Segment products based on price, weight, and availability
- Highlight the best-value products customers would love
- Help Zepto make smarter decisions with clear data insights

Business Requirements

- Understand which categories are the most profitable
- Track inventory efficiency (what's selling vs what's sitting)
- Highlight products to promote or restock
- Improve pricing and discount strategies
- Help marketing teams identify products for offers, bundles, etc.
- Spot premium items that are not discounted and selling at full price

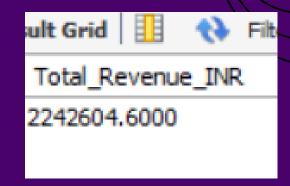
 The dataset was collected from Kaggle app which consists of 3000+ rows and 9 columns, and contains product-level details including price, discount, stock status, category, and weight. This helps simulate a real-world scenario of managing e-commerce inventory for a quick-commerce plaform

Columns: id, Category, name, mrp, discountPercent, availableQuantity, discountedSellingPrice, weightInGms, outOfStock, quantity

SQL Queires

Total Revenue Estimation

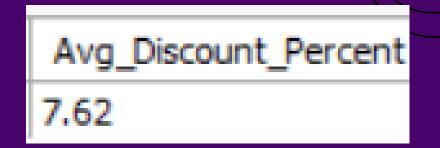
```
SELECT SUM(discountedSellingPrice * availableQuantity) / 100 AS Total_Revenue_INR
FROM zepto;
```



Insight: If all the available stock gets sold, the total revenue would be around ₹2M—which gives a good estimate of how much business can happen from the current inventory.

Find the Average Discount

SELECT ROUND(AVG(discountPercent), 2) AS Avg_Discount_Percent
FROM zepto;



Insight: On average, each product has a discount of around 7.62%. So yeah, Zepto seems to be offering pretty decent discounts overall.

SQL Queires

Find the top 10 best-value products based on the discount percentage.

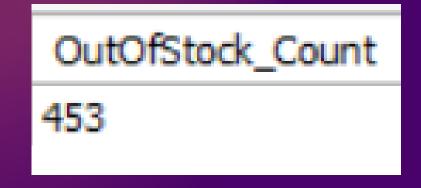
FROM zepto
ORDER By discountPercent DESC
LIMIT 10;

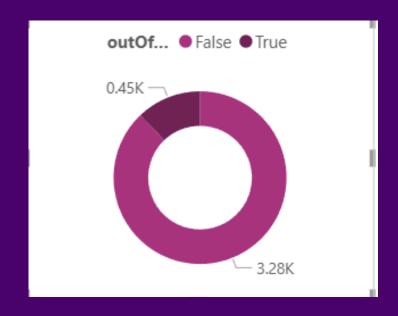
	name	mrp	discountPercent
•	Dukes Waffy Chocolate Wafers	4500	51
	Dukes Waffy Orange Wafers	4500	51
	Dukes Waffy Strawberry Wafers	4500	51
	Ceres Foods Fish Mustard Instant Liquid Masala	22000	50
	Ceres Foods Laal Maas Instant Liquid Masala	22000	50
	Ceres Foods Nalli Nihari Instant Liquid Masala	22000	50
	Chef's Basket Durum Wheat Elbow Pasta	16000	50
	Chef's Basket Durum Wheat Fusilli Pasta	16000	50
	Chef's Basket Durum Wheat Penne Pasta	16000	50
	Dukes Waffy Chocolate Wafer Rolls	15000	50

name •	mrp	discountPercent
Dukes Waffy Strawberry Wafers	4500	51
Dukes Waffy Orange Wafers	4500	51
Dukes Waffy Chocolate Wafers	4500	51
Dukes Waffy Chocolate Wafer Rolls	15000	50
Chef's Basket Durum Wheat Penne Pasta	16000	50
Chef's Basket Durum Wheat Fusilli Pasta	16000	50
Chef's Basket Durum Wheat Elbow Pasta	16000	50
Ceres Foods Nalli Nihari Instant Liquid Masala	22000	50
Ceres Foods Laal Maas Instant Liquid Masala	22000	50
Ceres Foods Fish Mustard Instant Liquid Masala	22000	50

Insight: These are the top 10 products with the highest discount percentages — basically the best value for customers. Great to promote these during sales or app banners.

```
SELECT COUNT(*) AS OutOfStock_Count
FROM zepto
WHERE outOfStock = 'True';
```





Insight: Found that several products are already out of stock — indicating popularity or potential supply issues.

SELECT name, availableQuantity
FROM zepto
ORDER BY availableQuantity DESC

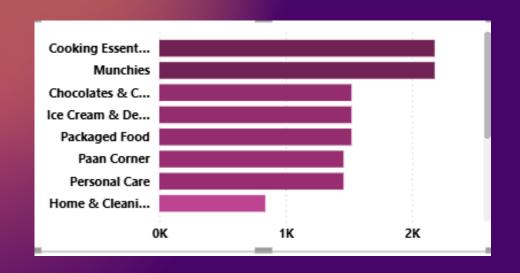
LIMIT 5;



Re	sult Grid	Export:
	name	availableQuan
•	Japanese Choice Udon Noodles	6
	Ching's Secret Just Soak - Whole Wheat Veg Ha	6
	Pantai Spring Roll Sauce	6
	MTR Vermicelli Payasam	6
	Bagrrys Corn Flakes	6

Insight: These 5 products have the highest available quantity in stock. could be good options for offers or combos.

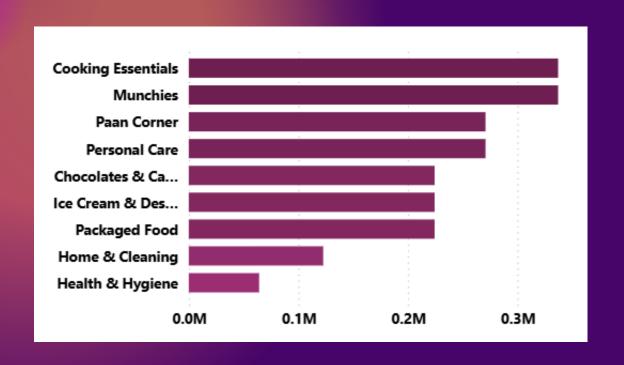
```
SELECT Category, SUM(availableQuantity) AS Total_Inventory
FROM zepto
GROUP BY Category
ORDER BY Total_Inventory DESC;
```



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K	esult Grid 🔡 🙌 F	iter Kows:
	Category	Total_Inventory
•	Cooking Essentials	2179
	Munchies	2179
	Packaged Food	1521
	Ice Cream & Desserts	1521
	Chocolates & Candies	1521
	Personal Care	1458
	Paan Corner	1458
	Home & Cleaning	839
	Dairy, Bread & Batter	485
	Beverages	485
	Biscuits	448
	Health & Hygiene	425
	Fruits & Vegetables	275
	Meats, Fish & Eggs	152
	Meats, Fish & Eggs	152

Insight: shows which categories have high/low stock.

```
SELECT Category, SUM(discountedSellingPrice * availableQuantity)/100 AS Revenue_INR
FROM zepto
GROUP BY Category
ORDER BY Revenue_INR DESC;
```



Result Grid				
Category	Revenue_INR			
Cooking Essentials	337131.0000			
Munchies	337131.0000			
Personal Care	270849.0000			
Paan Corner	270849.0000			
Packaged Food	224385.0000			
Ice Cream & Desserts	224385.0000			
Chocolates & Candies	224385.0000			
Home & Cleaning	122661.0000			
Health & Hygiene	64180.0000			
Dairy, Bread & Batter	55051.0000			
Beverages	55051.0000			
Biscuits	25007.6000			
Meats, Fish & Eggs	20693.0000			
Fruits & Vegetables	10846.0000			

Insight: Categories like Cooking Essentials, Munchies generate the most revenue, which can guide product focus.

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```

Result Grid 1					
Category	Avg_Discount	Avg_DiscountedRate			
Cooking Essentials	7.18	92.56			
Munchies	7.18	92.56			
Dairy, Bread & Batter	7.16	92.60			
Beverages	7.16	92.60			
Packaged Food	8.32	91.44			
Ice Cream & Desserts	8.32	91.44			
Chocolates & Candies	8.32	91.44			
Meats, Fish & Eggs	11.03	88.60			
Biscuits	8.24	91.59			
Personal Care	6.25	93.55			
Paan Corner	6.25	93.55			
Home & Cleaning	5.68	94.02			
Health & Hygiene	8.05	91.73			

Insight: Some categories are getting heavier discounts, but that doesn't always mean cheaper prices. There's a mix — like, some categories are high discount and high price, which can confuse customers.

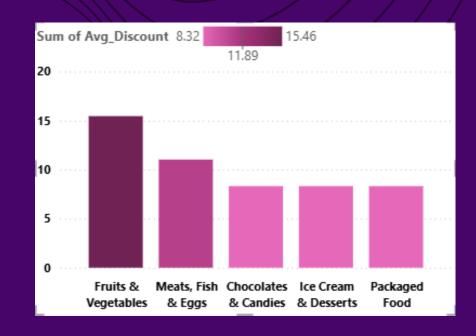
Categories with Highest Average Discount

```
GROUP BY Category

order by Avg_Discount DESC

limit 5;
```

Result Grid				
	Category	Avg_Discount		
•	Fruits & Vegetables	15.46		
	Meats, Fish & Eggs	11.03		
	Chocolates & Candies	8.32		
	Ice Cream & Desserts	8.32		
	Packaged Food	8.32		



Insight: Categories with the highest average discount may attract budget customers — useful for targeted offers.

Top 10 Expensive Products with low discount

SELECT DISTINCT NAME ,mrp , discountPercent
FROM zepto
where mrp > 500 and discountPercent <10
ORDER by mrp desc, discountPercent desc
limit 10;</pre>

NAME	mrp	discountPercent
Surf Excel Matic Top Load	72000	
Dhara Kachi Ghani Mustard Oil Jar	125000	
Surf Excel Matic Powder Front Load	81000	
Pedigree Puppy Dry Dog Food Food Chicken & Milk	69000	
Dhara Filtered Groundnut Oil (Jar)	105000	
Fortune Rice Bran Health Oil (Jar)	105000	
Dhara Filtered Groundnut Oil (Jar)	105000	
Fortune Soyabean Oil	100500	
Fortune Sunlite Refined Sunflower (Jar)	92500	
Saffola Gold (Jar)	124000	

	NAME	mrp	discount
•	Dhara Kachi Ghani Mustard Oil Jar	125000	8
	Saffola Gold (Jar)	124000	0
	Dhara Filtered Groundnut Oil (Jar)	105000	1
	Fortune Rice Bran Health Oil (Jar)	105000	1
	Dhara Filtered Groundnut Oil (Jar)	105000	0
	Fortune Soyabean Oil	100500	0
	Fortune Sunlite Refined Sunflower (Jar)	92500	0
	Surf Excel Matic Powder Front Load	81000	7
	Surf Excel Matic Top Load	72000	9
	Pedigree Puppy Dry Dog Food Food Chicken & Milk	69000	6
	,		

Insight: found a bunch of expensive products (MRP above ₹500) with barely any discount. These might be premium or essential items where Zepto doesn't want to lose margin.

```
select distinct name, weightInGms, discountedSellingPrice,
ROUND(discountedSellingPrice/weightInGms,2) as price_per_gm
from zepto
where weightInGms >= 100
order by price_per_gm;
```

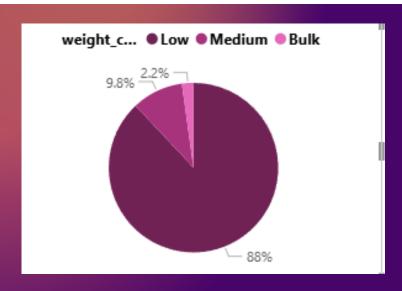
Re	sult Grid 🔢 💎 Filter Rows:	Export:	Wrap Cell Content: 1	Fetch rows:
	name	weightInGms	discountedSellingPrice	price_per_gm
Þ	Vicks Cough Drops Menthol	1160	2000	1.72
	Aashirvaad Iodised Salt	1000	1900	1.90
	Onion	3000	5700	1.90
	Onion	1000	2100	2.10
	Tata Salt	1000	2400	2.40
	Shubh kart - Nirmal sugandhi mogra wet dhoop	1160	2800	2.41
	Beetroot	500	1300	2.60
	Potato	3000	8400	2.80
	Shubh kart - Tejas Twisted Cotton Wicks 1000n	1000	2800	2.80

Insight: calculated the price per gram for products — some of them are super cheap per gram, others are expensive. Good to know which ones give more value for the weight.

weight based product segmentation

```
select distinct name , weightInGms,

CASE when weightInGms < 1000 Then 'Low'
    when weightInGms < 5000 Then 'Medium'
    Else 'Bulk'
    END as weight_category
from zepto;</pre>
```



	name	weightInGms	weight_catego
•	Onion	1000	Medium
	Tomato Hybrid	1000	Medium
	Tender Coconut	58	Low
	Coriander Leaves	100	Low
	Ladies Finger	250	Low
	Potato	1000	Medium
	Lemon	200	Low
	Watermelon	58	Low
	Capsicum Green	250	Low

Insight: Product weights are segmented as Low, Medium, or Bulk, useful for logistics, storage, and bundle pricing.

Key Outcomes

- Total revenue from in-stock inventory could be around ₹X showing potential business value if everything sells.
- On average, each product has a ~Y% discount, indicating customer-friendly pricing.
- Around Z products are out of stock, which might impact user experience and sales.
- Top 5 products with the most stock may need to be promoted or bundled if they're not moving.
- Revenue is highest in categories like X and Y clearly popular or high-value.
- Some categories offer heavy discounts, which could be a retention strategy or clearing slow stock.
- Identified the top 10 best-value products that have high discounts perfect for promotions.
- Found premium products with little to no discount, which might be kept for margin control.
- Segmented products based on weight (Low, Medium, Bulk) helpful for logistics planning.
- Calculated price per gram gives a smart way to compare product value, especially in staples.

Tools Used:

- SQL (MySQL) for querying and analysis
- Power BI for dashboards and data visualization
- Canva for visual storytelling and formatting



Thank You

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