SHOP NEST STORE REPORT

Shopnest:-

ShopNest leverages data analytics to empower small businesses and enhance customer experiences. This dashboard provides actionable insights into sales, delivery performance, and customer preferences, ensuring strategic agility in a competitive e-commerce landscape.

Purpose of the Dashboard:-

This Power BI dashboard is designed to help ShopNest's management team:

Track Sales Performance: - Identify top-selling categories, regional trends, and revenue growth.

Monitor Delivery Efficiency: - Analyse delayed vs. on-time orders to improve logistics.

Understand Customer Behaviour: - Evaluate payment method preferences and product ratings.

Discover Seasonal Trends: - Optimize inventory and marketing strategies based on quarterly sales patterns.

The dashboard consolidates 8 key analytical questions into a single, interactive view, enabling data-driven decision-making for business growth and customer satisfaction. We go step by step process

Data Modelling plan:-

Create these relationships in model view.

From: table (column)	Relationship	To: table (column)	Status
DateTable (Date)	* — 1	Nexusgoods_orders_dataset (1...	Active
Nexusgoods_customers_datas...	* — 1	Nexusgood_geolocation_datas...	Active
Nexusgoods_order_items_data...	* — 1	Nexusgoods_orders_dataset (1...	Active
Nexusgoods_order_items_data...	* — 1	Nexusgoods_products_dataset...	Active
Nexusgoods_order_items_data...	* — 1	Nexusgoods_sellers_dataset (s...	Active
Nexusgoods_order_payments_...	* — 1	Nexusgoods_orders_dataset (1...	Active
Nexusgoods_order_reviews_da...	* — 1	Nexusgoods_order_items_data...	Active
Nexusgoods_orders_dataset (1...	* — 1	Nexusgoods_customers_datas...	Active
Nexusgoods_orders_dataset (1...	* — 1	Nexusgoods_order_reviews_da...	Active
Nexusgoods_products_dataset...	* — 1	product_category_name_transl...	Active
Nexusgoods_sellers_dataset (zi...	* — 1	Nexusgood_geolocation_datas...	Inactive

Creating Date Table:

Using DAX Formula DateTable =

ADDCOLUMNS (

```
    CALENDAR (
        MIN('orders'[order_purchase_timestamp]),
        MAX('orders'[order_purchase_timestamp])
    ),
    "Year", YEAR([Date]),
    "MonthNumber", MONTH([Date]),
    "MonthName", FORMAT([Date], "MMMM"),
    "Quarter", "Q" & FORMAT([Date], "Q")
)
```

DAX Measures Creation:-

1) Total Revenue

```
Total Revenue =SUMX(
'order_items',
'order_items'[price] + 'order_items'[freight_value]
)
```

2)Total Orders

```
Total Orders = DISTINCTCOUNT('orders'[order_id])
```

3)Average Review Score

```
AverageReviewScore=
AVERAGE('order_reviews'[review_score])
```

4)Delayed Orders

```
Delayed Orders = CALCULATE( COUNTROWS('orders'),
'orders'[IsDelayed] = "Delayed")
```

5)On-Time Orders

```
OnTime Orders = CALCULATE(COUNTROWS('orders'),
'orders'[IsDelayed] = "On-Time")
```

6)Total Revenue

```
Total Revenue = SUMX(
'Nexusgoods_order_items_dataset',
'Nexusgoods_order_items_dataset'[price] +
'Nexusgoods_order_items_dataset'[freight_value]
```

Key Insights

1) Top Categories by Total Price

- **Dataset:** Nexusgoods_order_items_dataset.csv,

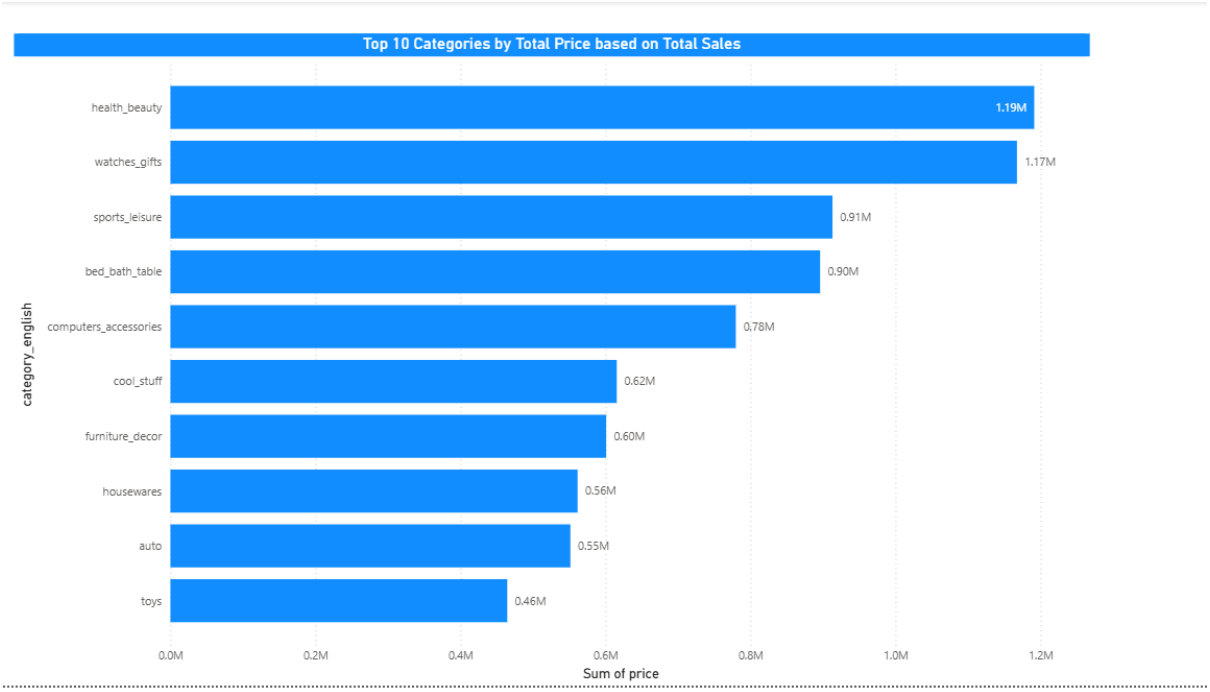
  Nexusgoods_products_dataset.csv,

  (Optional: product_category_name_translation.csv)

- **Goal**: Identify and visually represent the top 10 product categories by total revenue (price + freight).
- **Visual**: Stacked bar chart
- **JoinPath:**product_id → map to product_category_name
- **Fields Needed:**

  i)X-axis:- Sum of Price

  ii)Y-axis:- Category_english
- **Filters:** Category_english->Top N-> 10 by Sum of Price



2. Delayed Orders Analysis

- **Dataset:** Nexusgoods_orders_dataset.csv, Nexusgoods_order_items_dataset.csv, Nexusgoods_products_dataset.csv
- **Goal:** Show number of delayed orders in each product category.

An order is delayed if order_delivered_customer_date > order_estimated_delivery_date.

- **Visual:** Matrix (so that all category corresponding values are visible)
- **Fields Needed:**

  i)Values:- Delayed Orders, On-Time Orders

  ii)Rows:- Category_english

Delayed Orders Analysis

category_english	Delayed Orders	On-Time Orders
agro_industry_and_commerce	9	151
air_conditioning	7	212
art	14	158
arts_and_craftmanship	1	19
audio	39	272
auto	289	3238
baby	227	2333
bed_bath_table	688	7539
books_general_interest	32	412
books_imported	1	45
books_technical	25	200
cds_dvds_musicals		12
christmas_supplies	11	101
cine_photo	5	53
computers	10	151
computers_accessories	436	5496
consoles_games	73	887
construction_tools_construction	57	592
construction_tools_lights	19	192
construction_tools_safety	5	141
cool_stuff	215	3070
costruction_tools_garden	13	160
costruction_tools_tools	5	81
diapers_and_hygiene	1	23
drinks	18	242
dvds_blu_ray	3	50
electronics	215	2062
fashio_female_clothing	2	34
fashion_bags_accessories	96	1541
fashion_childrens_clothes		7
fashion_male_clothing	3	97
fashion_shoes	12	202
Total	**6700**	**80114**

3. Monthly Comparison of Delayed and On-Time Orders

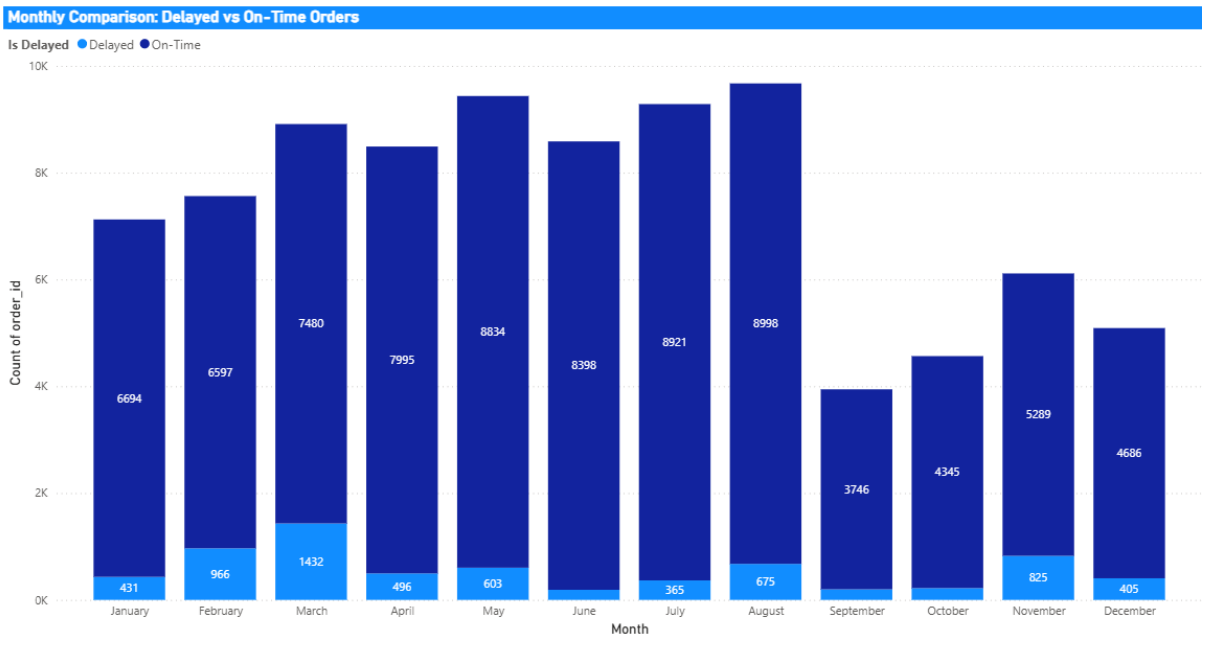
- **Dataset:** Nexusgoods_orders_dataset.csv,

  Create a date table from order_purchase_timestamp

- **Goal:** Show monthly count of delayed vs on-time orders side by side.
- **Visual:** Stacked column chart
- **Fields Needed:**
  i)X-Axis: Order_Purchase_Timestamp-> Month

  ii)Y-Axis: Count of order_id

  iii)Legend: Is Delayed

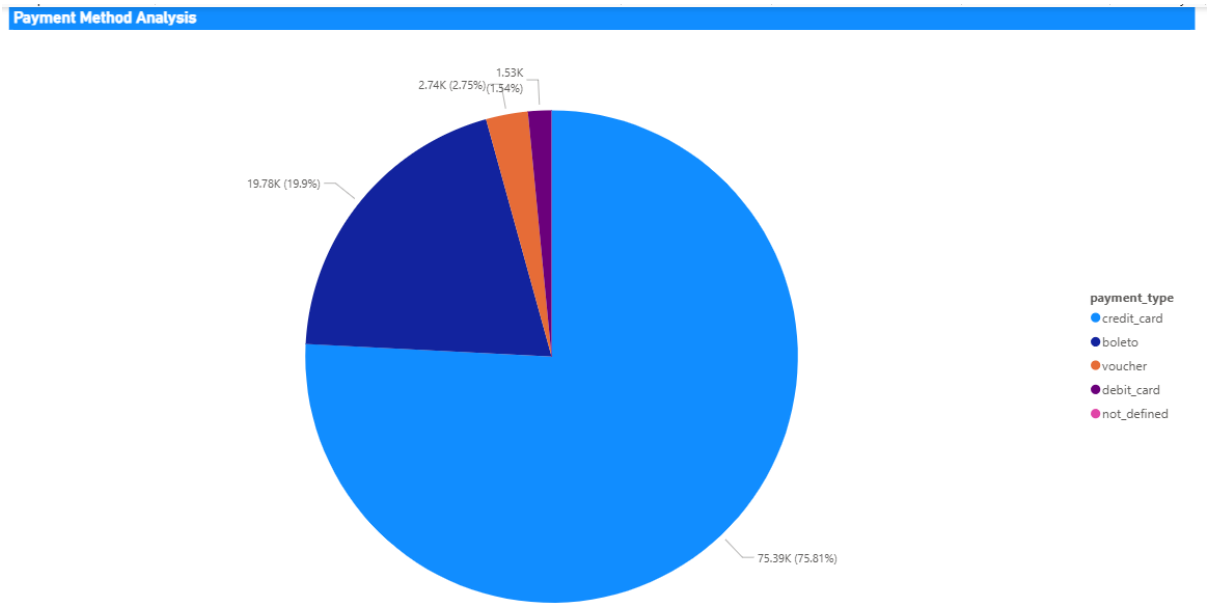


4. Payment Method Analysis

- **Dataset**: Nexusgoods_order_payments_dataset.csv
- **Goal:** Show the count and share (%) of each payment method.
- **Visual:** Pie chart
- **Fields Needed:**

  i)Legend: Payment_type

  ii)Values: Count of order_id



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5. Product Rating Analysis

- **Dataset:** Nexusgoods_order_reviews_dataset.csv, joined with Nexusgoods_order_items_dataset.csv and Nexusgoods_products_dataset.csv

A. Top 10 highest-rated products:

i)Visual: Stacked Bar Chart

ii)Fields Needed:

a) X-axis:-Average of Review Score

b) Y-axis:-Category_english

iii)Filter:- Category_english->Top N->10

a)By value:- Average of Review Score

B. Bottom 10 highest-rated products:

i)Visual: Stacked Bar Chart

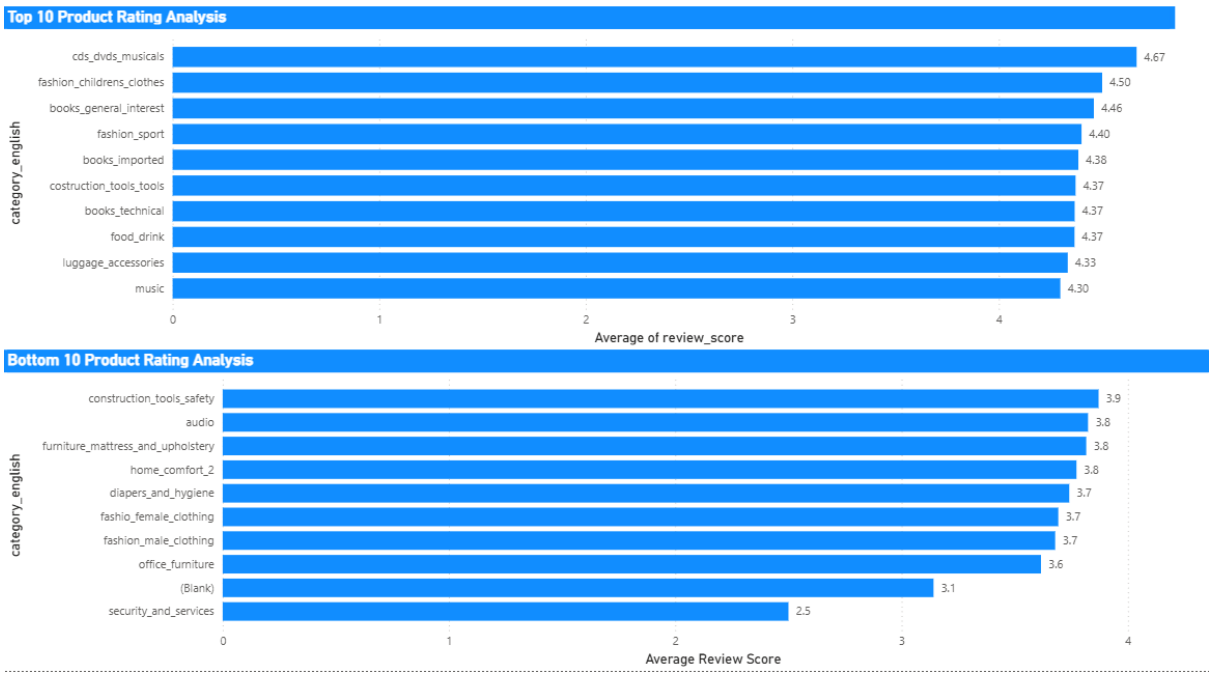
ii)Fields Needed:

a) X-axis:-Average of Review Score

b) Y-axis:-Category_english

iii)Filter:- Category_english->Top N->Bottom->10

a)By value:- Average of Review Score

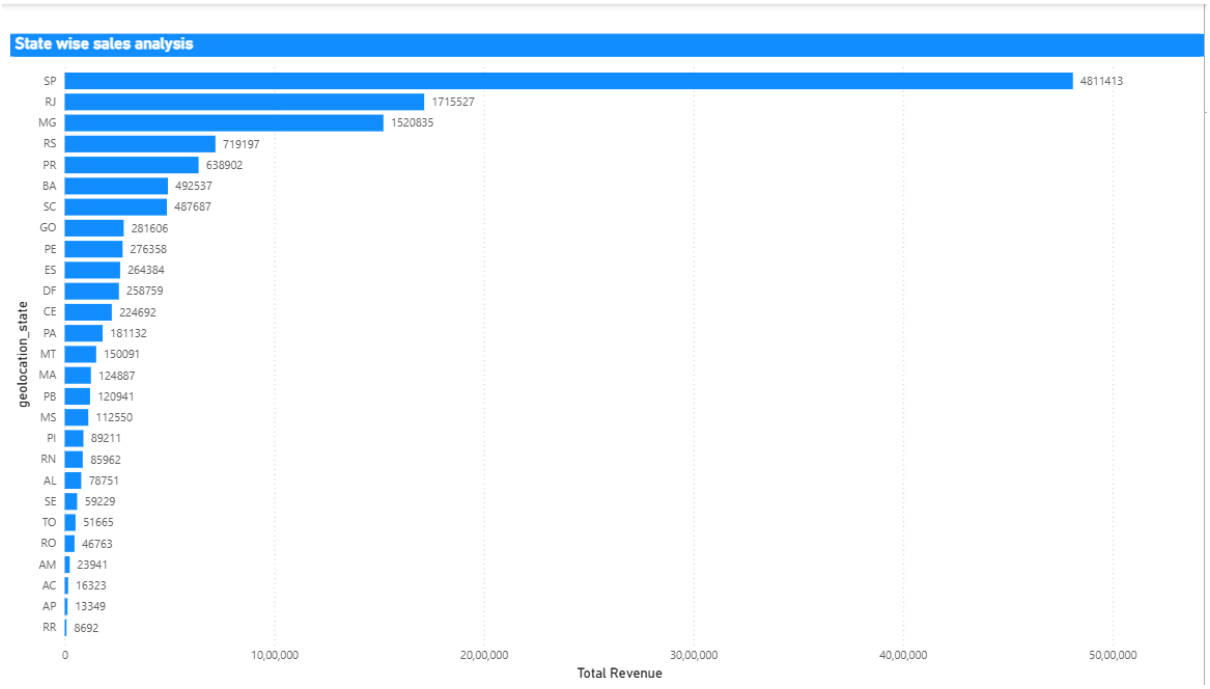


6. State-wise Sales Analysis

- **Dataset:** Nexusgoods_orders_dataset.csv + customers + geolocation
- **Goal:** Identify high/low sales by state
- **JoinPath:** orders → customers → customer_zip_code_prefix → geolocation (zip/state)
- **Visual**: Stacked Bar Chart
- **Fields Needed**:

  i)Y-axis:- Geolocation_state

  ii)X-axis:- Total Revenue

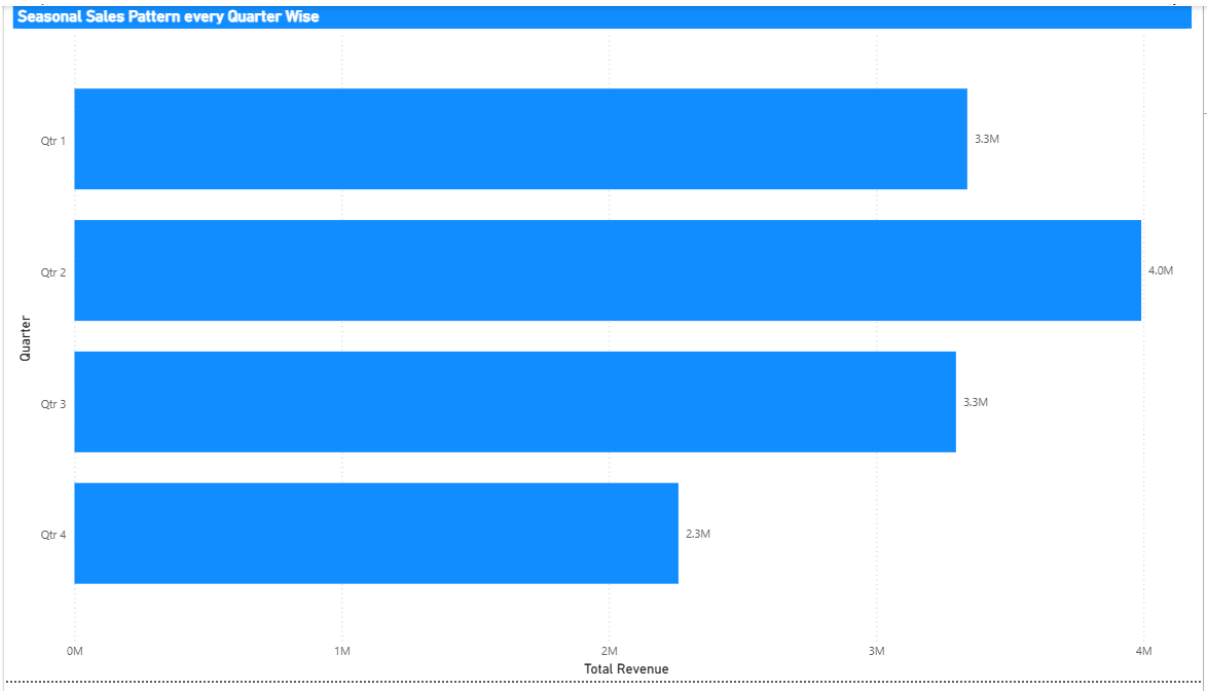


7. Seasonal Sales Patterns

- **Dataset:** Nexusgoods_orders_dataset.csv + order_items
- **Goal:** Visualize quarterly sales trends
- **Visual:** Stacked Bar chart by quarter
- **Fields:**

  i)Y-axis:- order_purchase_timestamp->Quarter

  ii)X-axis:- Total Revenue (or) Sum of order item value (price + freight)

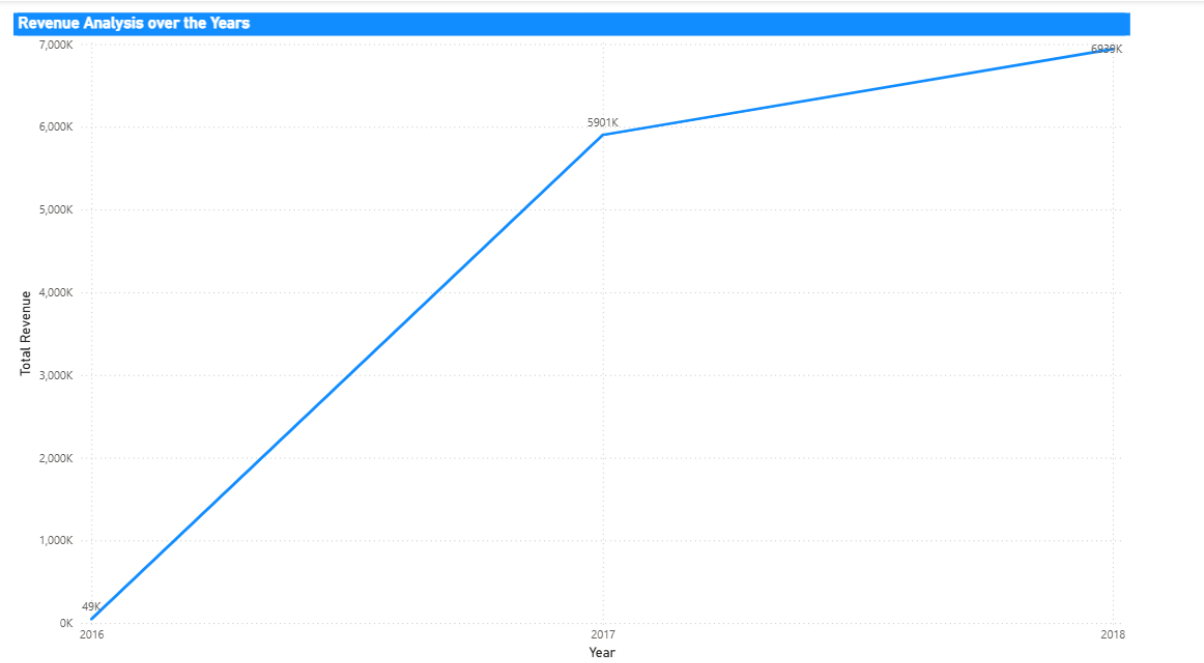


8. Revenue Analysis

- **Dataset:** Nexusgoods_order_items_dataset.csv + orders
- **Goal:** Analyse yearly revenue
- **Visual:** Line chart
- **Fields:**

  i)X-axis:-order_purchase_timestamp->Year

  ii)Y-axis:-Total Revenue



Conclusion:- On creating visualisations for all the questions asked we almost covered all the parameters related to business analytics of ShopNeststore which if used tactically will fetch amazing results in the growth of the company. Also since every question required broad visualisation each question is visualised in a seperate page.