



# PRAMOD KUMAR SAHOO

Data & Business analyst portfolio

[LINKDIN](#)

[GIT\\_HUB](#)



## ABOUT ME

- My name is **Pramod Kumar Sahoo**, I'm naturally curious about data and enjoy collaborating with teams to solve real business problems using analytics also enjoy working in collaborative environments where data-driven thinking helps teams make better decisions, which keep me motivated and engaged.
- My goal is to build data-driven solutions that help organizations understand their performance, identify opportunities, and make confident decisions backed by data.
- My journey into data analytics started with my strong interest in numbers, patterns, and problem-solving. With a background in Physics, I developed analytical thinking and logical reasoning skills that naturally led me toward data analysis
- During my professional experience at Manidhar Textile, I worked closely with business data to clean datasets, perform exploratory analysis, and build dashboards that supported decision-making. This experience helped me understand how data directly impacts operational efficiency and financial performance.
- I enjoy transforming complex datasets into simple, clear insights that stakeholders can easily understand and act upon.



## EDUCATION

### UTKAL UNIVERSITY BHUBANESWARA, ODISHA

JUNE 2021 – MARCH 2024

- I completed my B.Sc. (Hons.) in Physics from Utkal University, where I developed strong analytical thinking, quantitative reasoning, and structured problem-solving skills. Working with mathematical concepts strengthened my ability to analyze patterns — a skill that naturally supports my work in data analytics today.

# CERTIFICATION



## TATA Data Visualization: Empowering Business with insights

- Through this program, I worked with real-world sales datasets to analyze trends, build interactive dashboards, and generate business insights using Python, SQL, Excel, and Power BI. The experience strengthened my ability to connect data analysis with real business outcomes.

## Pre-MBA Statistics BY IIM Ahmadabad

- This course helped me understand how statistics supports real-world decision-making. I learned how probability, sampling, and data interpretation help businesses evaluate uncertainty and make informed strategic choices.



## EXPERIENCE

### Junior Data and Business analyst

During my one-year experience, I worked on transforming operational and financial data into actionable insights that supported business decision-making. I collaborated with multiple teams to understand business requirements and deliver analytics solutions aligned with organizational goals.

**Key Contributions:**

- Built interactive Power BI dashboards to monitor financial performance across 200+ client accounts.
- Created 20+ analytical reports translating complex datasets into clear business insights.
- Optimized reporting workflows, reducing manual processing time by 20%
- .
- Helped improve collection rates by 25% and reduced claim denial rates by 30% through data-driven monitoring.



## SKILLS & ABILITIES

**Data Analysis:** SQL, Python (Pandas, NumPy)

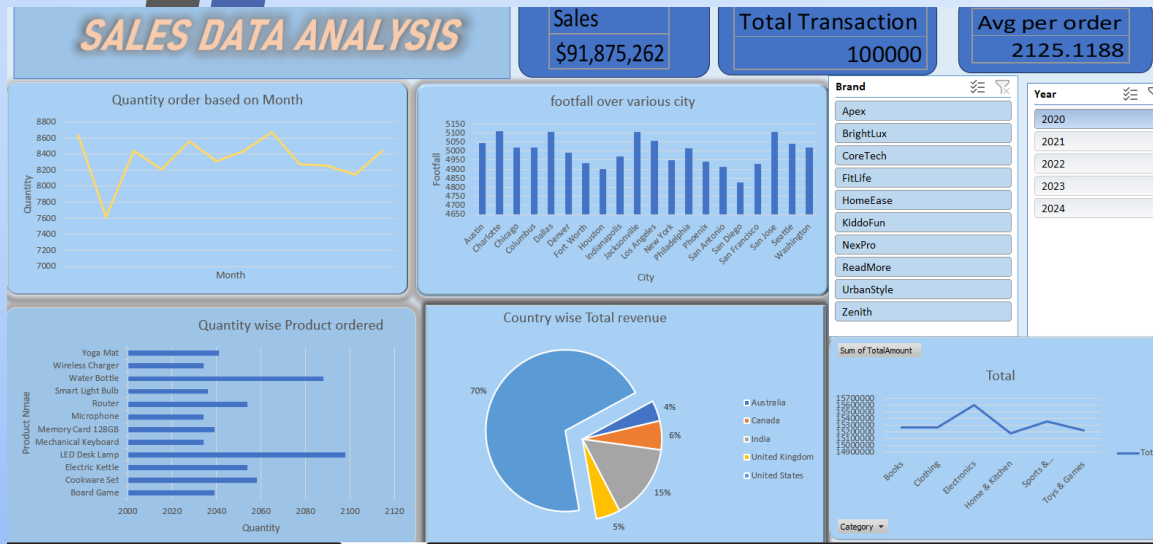
**Visualization:** Power BI, Matplotlib, Seaborn

**Data Preparation:** Excel, Power Query

**Workflow & Collaboration:** Jira (Scrum, Kanban)

**AI Productivity:** Presentation, Research, Analysis

# E-Commerce Sales Data analysis Dashboard



## INSIGHTS:

- I analyzed over 100K transactions generating \$91.8M in sales to understand customer purchasing behavior and market performance.
- The analysis revealed a strong average order value, indicating a premium product positioning and consistent customer demand throughout the year.
- These insights suggest opportunities for focused expansion in high-performing markets like Australia..

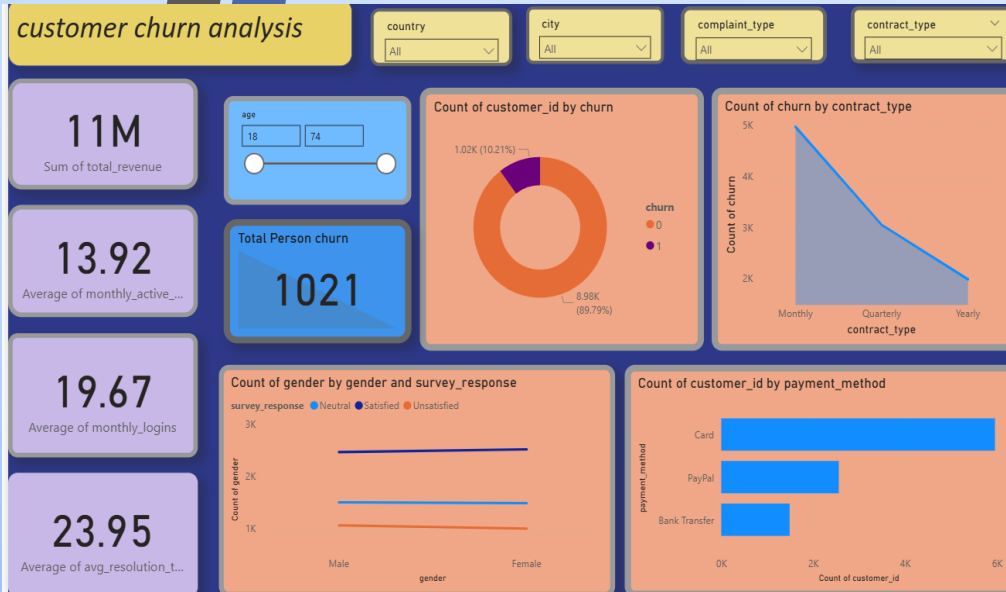
## TOOLS

- Excel
- Power Query

## Skills

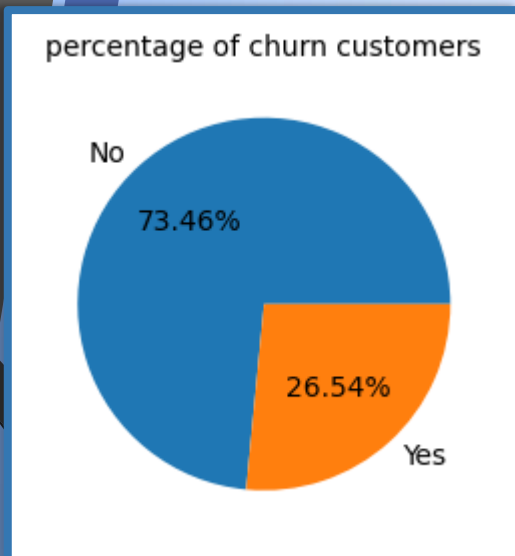
- Data cleaning
- EDA & Analysis
- Business Understanding
- Formula

# CUSTOMERS CHURN ANALYSIS



## INSIGHTS:

- This project focused on identifying why customers leave the business. Using Power BI and Python, I analyzed customer demographics, contract types, and behavior patterns.
- The analysis showed that churn was strongly influenced by contract type rather than age group, with monthly contracts having the highest risk.
- These insights highlight retention opportunities through long-term plans and improved customer experience



## Tools:

- Power BI
- POWER QUERY
- PYTHON

## Skills

- Data cleaning
- Data merge
- KPI

[LINK PROJECT](#)



# SQL DATA ANALYSIS

```
1 -- Identify the highest-priced pizza.
2
3 • SELECT
4     pizza_types.name, pizzas.price
5 FROM
6     pizza_types
7     JOIN
8     pizzas ON pizza_types.pizza_type_id = pizzas.pizza_type_id
9 ORDER BY pizzas.price DESC
10 LIMIT 1;
```

Result Grid			Filter Rows:
	name	price	
▶	The Greek Pizza	35.95	35.95

```
1 -- Determine the top 3 most ordered pizza types based on revenue.
2
3 • select pizza_types.name,
4     sum(order_details.quantity * pizzas.price) as revenue
5 from pizza_types join pizzas
6 on pizzas.pizza_type_id = pizza_types.pizza_type_id
7 join order_details on order_details.pizza_id = pizzas.pizza_id
8 group by pizza_types.name order by revenue desc limit 3;
```

Result Grid			Filter Rows:
	name	revenue	
	The Thai Chicken Pizza	43434.25	
	The Barbecue Chicken Pizza	42768	
	The California Chicken Pizza	41409.5	

```
1 -- group the orders by date and calculate the average number of pizzas ordered per day.
2
3 • select round( avg(quantity),0) as avg_pizza_ordered_per_day from
4     (select orders.date,sum(order_details.quantity) as quantity
5     from orders join order_details
6     on orders.order_id = order_details.order_id
7     group by orders.date) as order_quantity;
```

avg_pizza_ordered_per_day	
▶	138

- Using SQL joins, aggregations, and grouping techniques, I transformed raw transactional data into meaningful business metrics.
- The analysis identified daily demand patterns, helping support decisions related to staffing, inventory planning, and pricing strategy.

**MORE PROJECT  
LINK**

# Exploratory Data Analysis

To know details about my csv file.

```
pd.isnull(df)
```

	Transaction ID	Date	Customer ID	Gender	Age
Category \					
0	False	False	False	False	False
1	False	False	False	False	False
2	False	False	False	False	False
3	False	False	False	False	False
4	False	False	False	False	False
...	...	...	...	...	...
995	False	False	False	False	False
996	False	False	False	False	False
997	False	False	False	False	False
998	False	False	False	False	False
999	False	False	False	False	False

To check null value.

```
#To check for null value clearly.  
pd.isnull(df).sum()
```

Transaction ID	0
Date	0
Customer ID	0
Gender	0
Age	0
Product Category	0
Quantity	0
Price per Unit	0
Total Amount	0
dtype:	int64

```
#I don't have any null value but if i have null value then i do df.dropna(inplace=True)
```

## Exploratory data Analysis

```
# Gender
```

```
df['date'] = pd.to_datetime(df['date'])
```

```
# Create Year and Month columns  
df['year'] = df['date'].dt.year  
df['month'] = df['date'].dt.month
```

```
df['month_name'] = df['date'].dt.month_name()  
df.columns = df.columns.str.strip().str.lower().str.replace(' ', '_')  
df['date'] = pd.to_datetime(df['date'])
```

```
df.head()
```

	transaction_id	date	customer_id	gender	age	product_category
0	1	2023-11-24	CUST001	Male	34	Beauty
1	2	2023-02-27	CUST002	Female	26	Clothing
2	3	2023-01-13	CUST003	Male	50	Electronics
3	4	2023-05-21	CUST004	Male	37	Clothing
4	5	2023-05-06	CUST005	Male	30	Beauty

	quantity	price_per_unit	total_amount	year	month	month_name
0	3	50	150	2023	11	November
1	2	500	1000	2023	2	February
2	1	30	30	2023	1	January

## SKILLS

- I use python to validate data quality, standardize columns and prepare a clean, analysis-ready dataset for business intelligence and visualization.

## INSIGHTS

- This analysis transforms raw transactional data into actionable business insights by focusing on value.
- The clean data structure make it ideal for decision making, performance tracking and strategic planning.

997	False	False	False	False	False
998	False	False	False	False	False
999	False	False	False	False	False
...	...	...	...	...	...
995	False	False	False	False	False
996	False	False	False	False	False
997	False	False	False	False	False
998	False	False	False	False	False
999	False	False	False	False	False

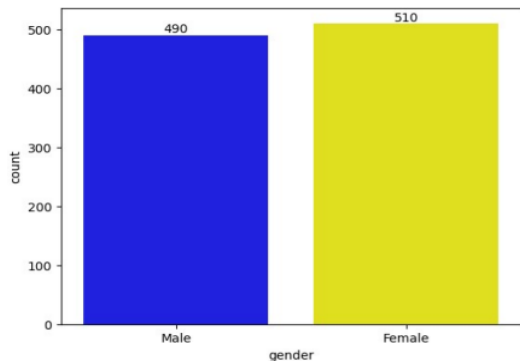
	Quantity	Price per Unit	Total Amount
0	False	False	False
1	False	False	False
2	False	False	False
3	False	False	False
4	False	False	False
...	...	...	...
995	False	False	False
996	False	False	False
997	False	False	False
998	False	False	False
999	False	False	False

[1000 rows x 9 columns]

```
df.columns
Index(['transaction id', 'date', 'customer id', 'gender', 'age',
      'product category', 'quantity', 'price per unit', 'total
      amount'],
      dtype='object')

ax = sns.countplot(x = 'gender', data = df, hue=
'gender', palette={'Male': 'blue', 'Female': 'yellow'}, legend= False)

for bars in ax.containers:
    ax.bar_label(bars)
```



From above graph we can see that female are slightly higher than Male means purchasing power of Female are higher than male.

```
stacked_amount =(df.groupby(['product_category', 'gender'])
['total amount']
.sum()
.unstack())

stacked_amount.plot(kind='bar',
stacked=True,
figsize=(12,5))

plt.title("Product-wise Total Amount (Stacked by Gender)")
plt.xlabel("Product Category")
plt.ylabel("Total Amount")
plt.xticks(rotation=30)
plt.legend(title="Gender")
plt.show()
```

## SKILLS

- Data manipulation for reshape data find hidden patterns .
- Statistical visualization(matplotlib, seaborn) – for charts more readable.

## INSIGHTS

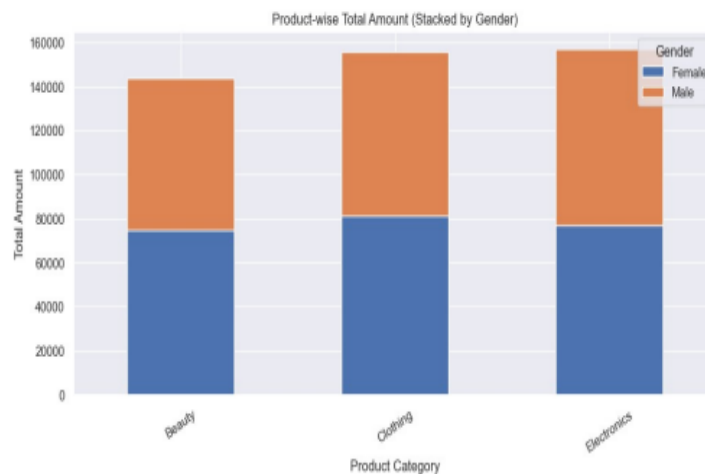
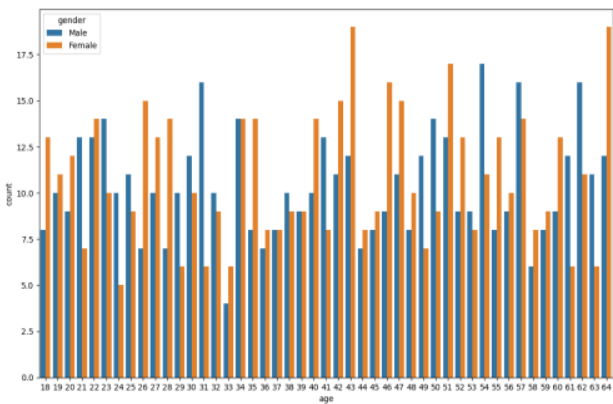
- I performed data cleaning, validation, and visualization using Python to uncover customer purchasing patterns. The analysis revealed stronger engagement among female shoppers and purchasing behavior spread across multiple age groups, indicating broad brand appeal rather than a single target demographic.

### Age

```
df.columns
Index(['Transaction ID', 'Date', 'Customer ID', 'Gender', 'Age',
      'Product Category', 'Quantity', 'Price per Unit', 'Total
      Amount'],
      dtype='object')

plt.figure(figsize=(13,8))
sns.countplot(x = 'age', data = df, hue= 'gender')

<Axes: xlabel='age', ylabel='count'>
```



#From above graphs we see gender wise total amount of product buy. we see male spent their money on clothing than beauty.