



**BDM Capstone Project [May 2025]**

# Driving Growth Through Enhanced Revenue, Reach, and Operational Efficiency

*by Sujal Raj Pradhan [23F2004759]*



# The Business and The Problems

## About the Business

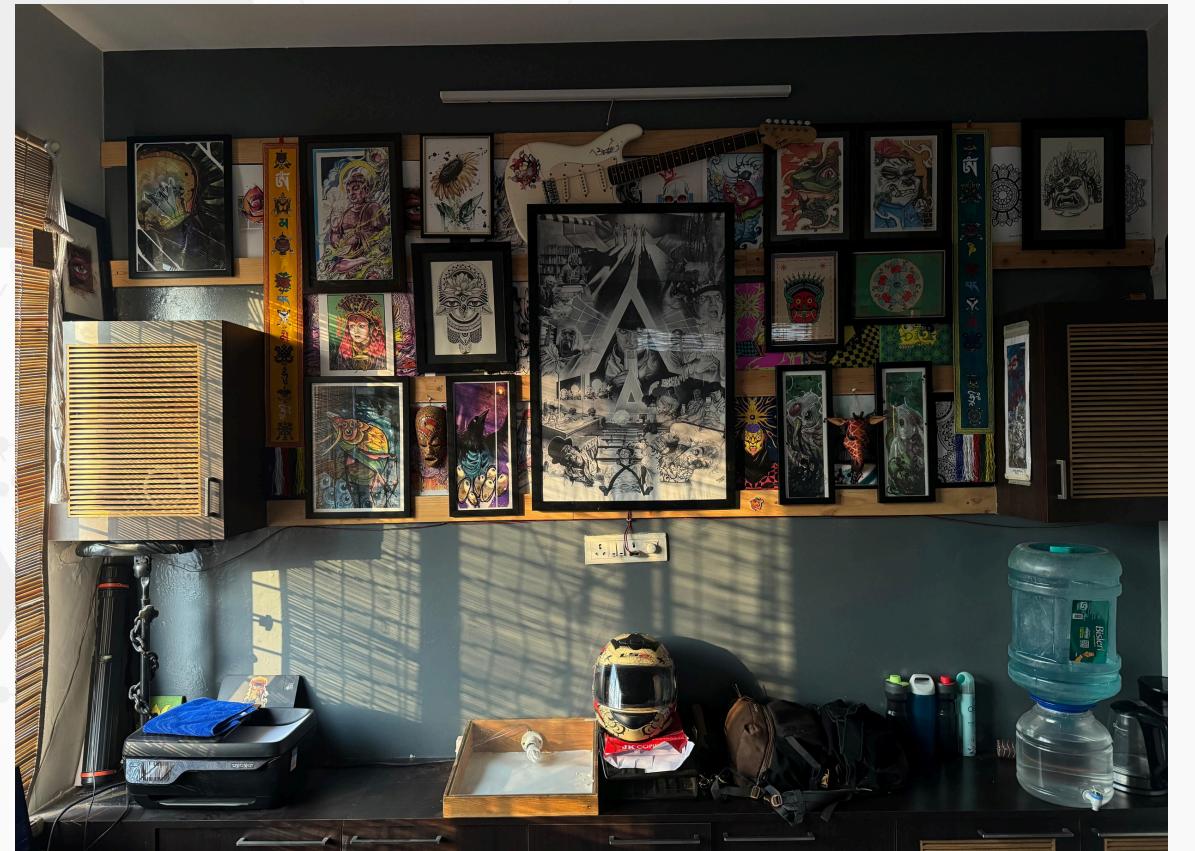
- **Name of the Business:** Ink Over Matter
- **Type of Business:** B2B Tattoo studio offering custom tattoo services
- **Location:** Kodahalli, Bangalore, India
- **Founder:** Mr. Anurag Pradhan
- **Background:** The shop was founded in 2012 by the founder. He has been operating the business solely ever since.

## Problems

- **Digital Absence and lack of Marketing**
- **Operational Scalability Limitations**
- **Single Source of Revenue**

## Data Collection

- The details of the transactions and appointments were all stored digitally by the Founder from 2024
- The dataset for working was taken from 2018 till 2024



# Data Cleaning and Preprocessing

Before going ahead with the analysis part it was necessary to **clean and preprocess the data**.

**Date Parsing and Breakdown:** I changed the values in the Date of Appointment column to a more uniform format which is suitable for data analysis and from that format, I extracted Year, Month of the Year, Day of the Week.

- Month of the Year : 1 (January) - 12 (December)
- Day of the Week : This column follows a zero based indexing where 0 = Monday and 6 = Sunday

**Binary Conversion:** I altered the Is Revisit column's mapping from the strings 'Yes' and 'No' to binary '1' and '0', to simplify aggregation.

**Categorical Normalization:** I changed the values in the Date of Appointment column to a more uniform format which is suitable for data analysis and from that format, I extracted Year, Month of the Year, Day of the Week.

- All string-based categorical fields (Gender, Type of Tattoo, Body Part, State etc.) were normalized by changing them to proper case (e.g., "male" → "Male").
- Different spellings but the same entries were combined into one normalized value (e.g., "forearm" and "Forearm" were unified).

# Objective and the Methods

**Objective:** The aim of the project is to analyse the extracted data and draw out actionable insights that may help the business to boost up their revenue and also to expand their online presence

**Methods of Analysis:** After a rigorous data cleaning and preprocessing operation, 5 methods of analysis were deployed on the preprocessed dataset to uncover categorical sales influence, product performance, customer behaviour and future sales trends.



## Income Trends over the years and Revenue Estimation

To understand whether the business is growing steadily or not



## Monthly Appointment Patterns Post Covid-19

To identify the trends, yearly patterns and months with the highest client engagement



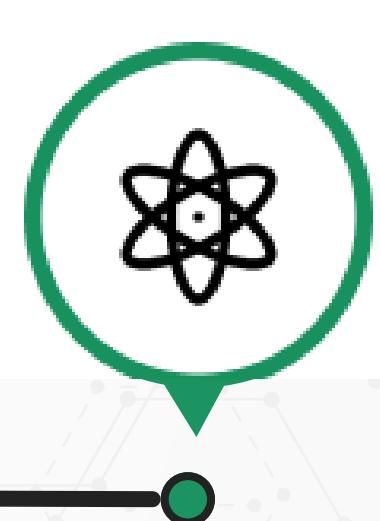
## Customer Geo-Mapping (State-wise)

Understand client state-wise distribution and try to identify regions of interest.



## Age group distribution and revenue

Understand what age group of clients contribute most to the revenue



## Client Retention Rate

Understand the ratio of first-time clients vs Returning clients and their revenue contribution.

## ANALYSIS 1

# Income Trends over the years and Revenue Estimation

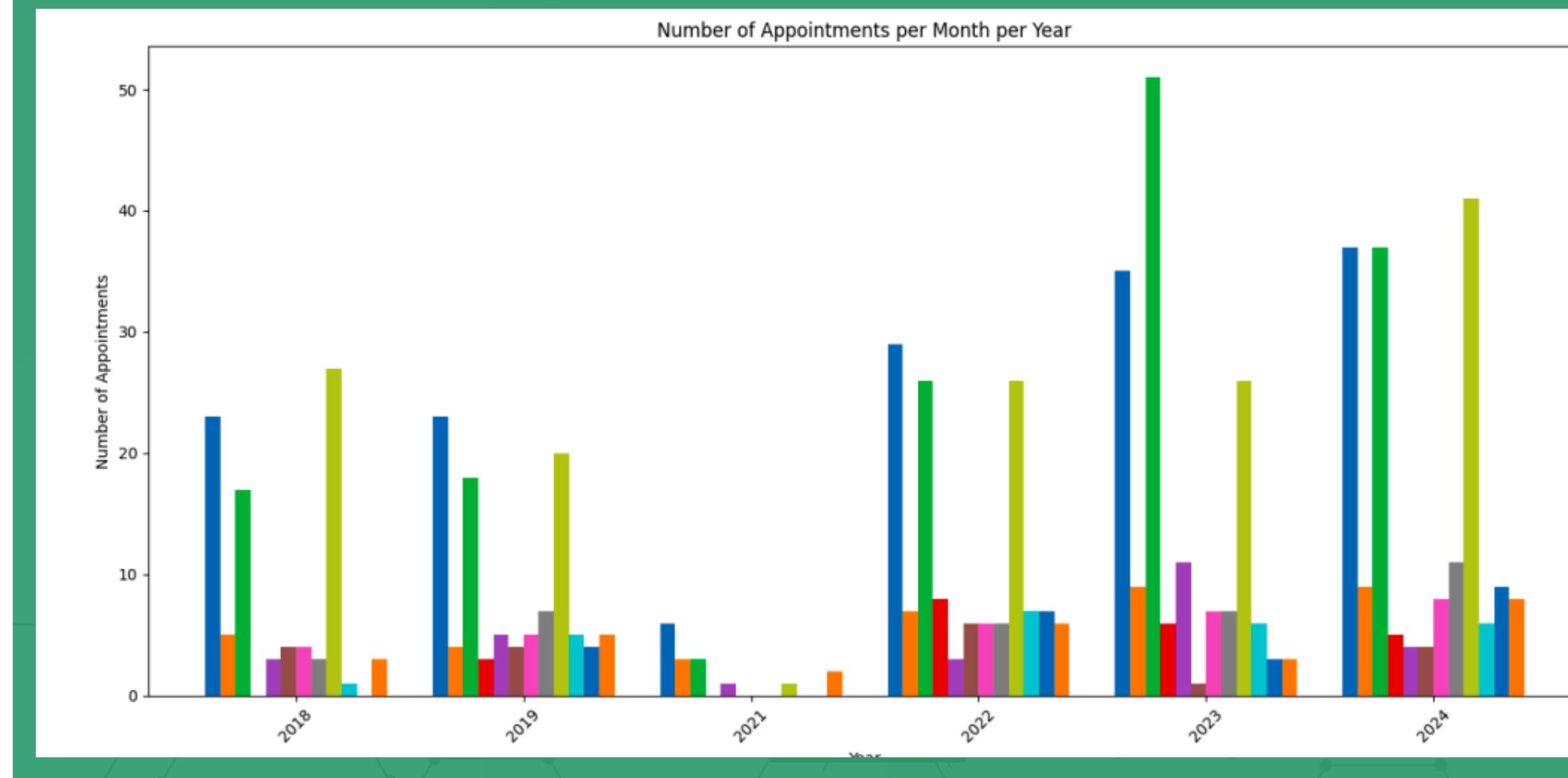
## Explanation

**Time-Series Analysis of Appointment trends yearly:** The first graph takes into account the yearly month-wise appointments.

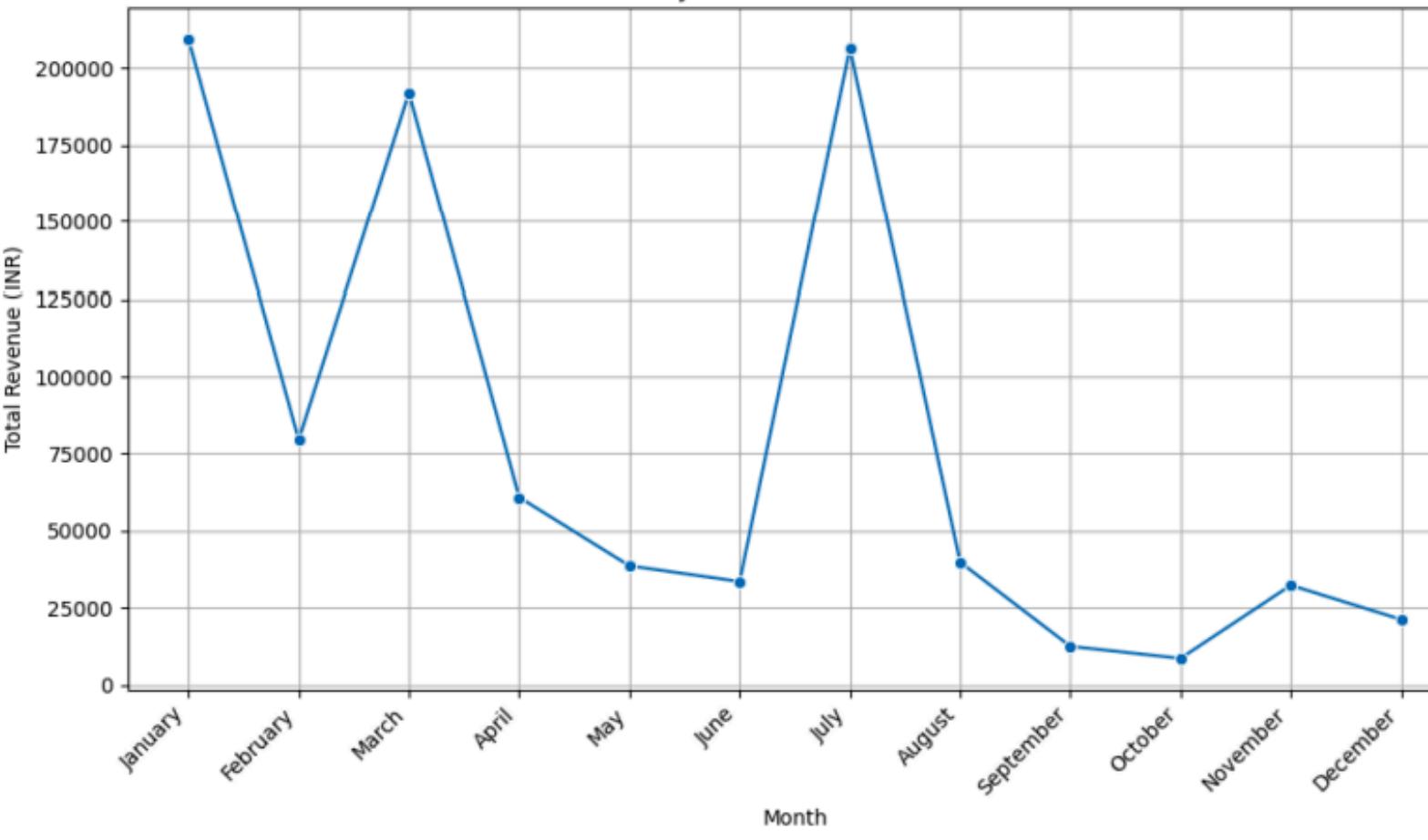
**Time Series Analysis of Total Income per year:** The second graph takes into account the year wise total income.

## Results and Findings

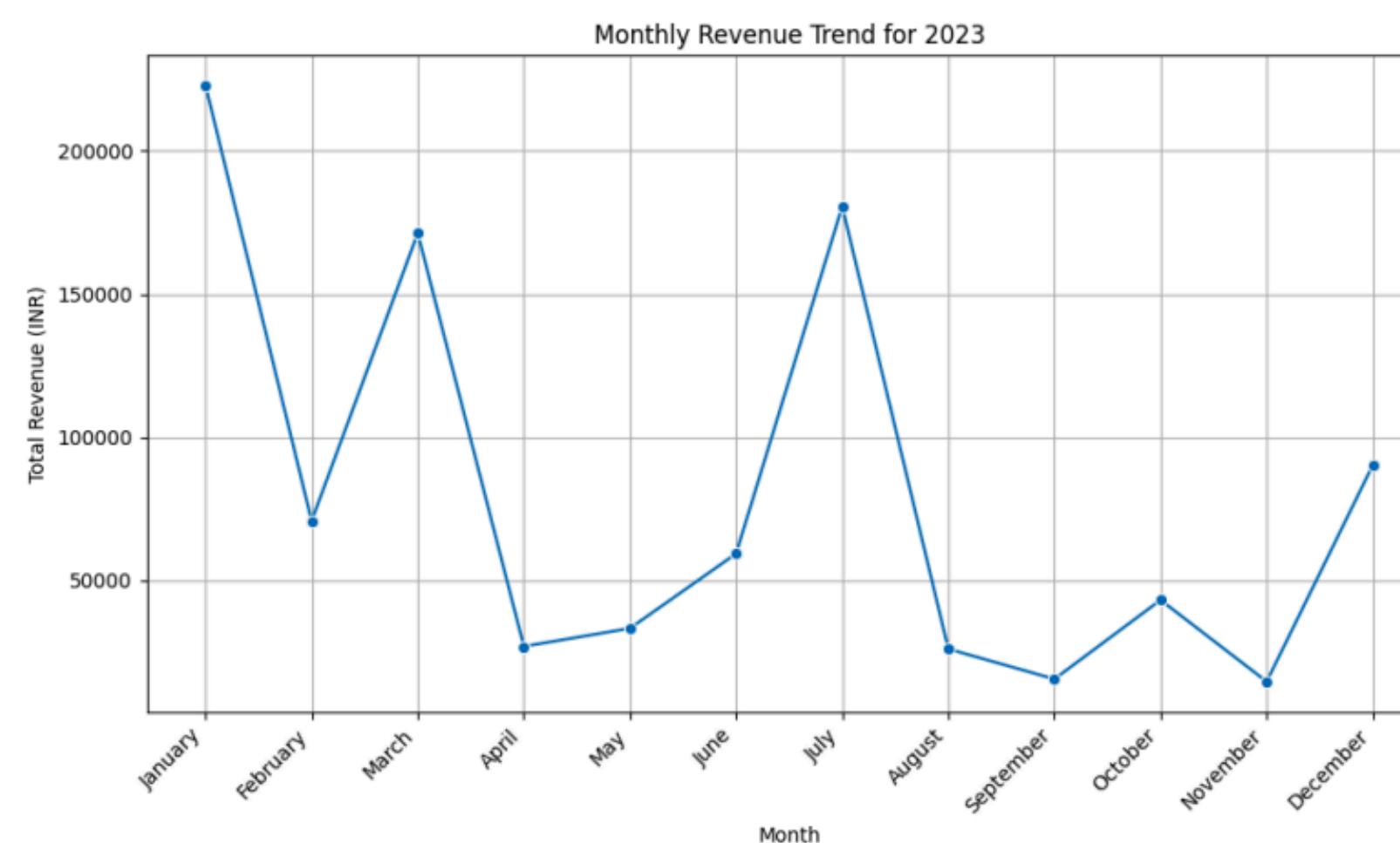
- The studio had consistent appointment booking as well as income before 2020.
- The studio had suffered an extreme loss due to COVID-19 in 2020 due to which there was almost no income
- In 2021, the studio had just a handful of appointment which resulted in minimal income
- Post Covid-19, the year 2022 had a substantial comeback and looked promising for the studio
- The following years 2023 and 2024 have had consistent customers and resulted in more revenue.



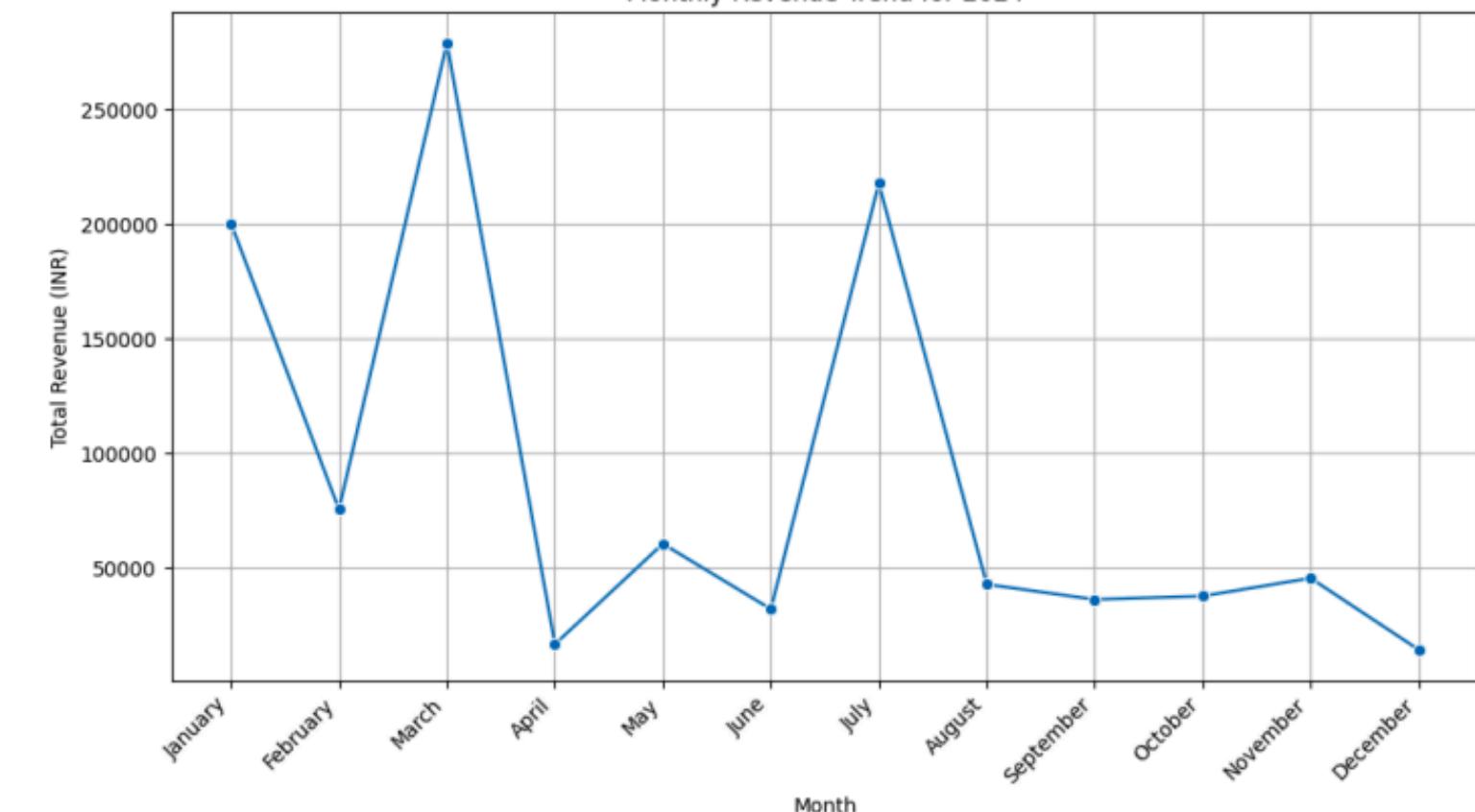
Monthly Revenue Trend for 2022



Monthly Revenue Trend for 2023



Monthly Revenue Trend for 2024



## ANALYSIS 2

# Monthly Revenue Trends Post Covid-19

## Explanation

The monthly patterns were analysed to see which months have the highest client retention post Covid-19.

## Results and Findings

- The months which the highest client engagement are January, March and July.
- In a conversation with the founder, he had mentioned that in the months of January people often get a tattoo due to the new year bonus and new years resolutions
- In March, clients came in to get tattoos due to April being the end of the financial year so people could file it under entertainment section in the ITR.

## ANALYSIS 3

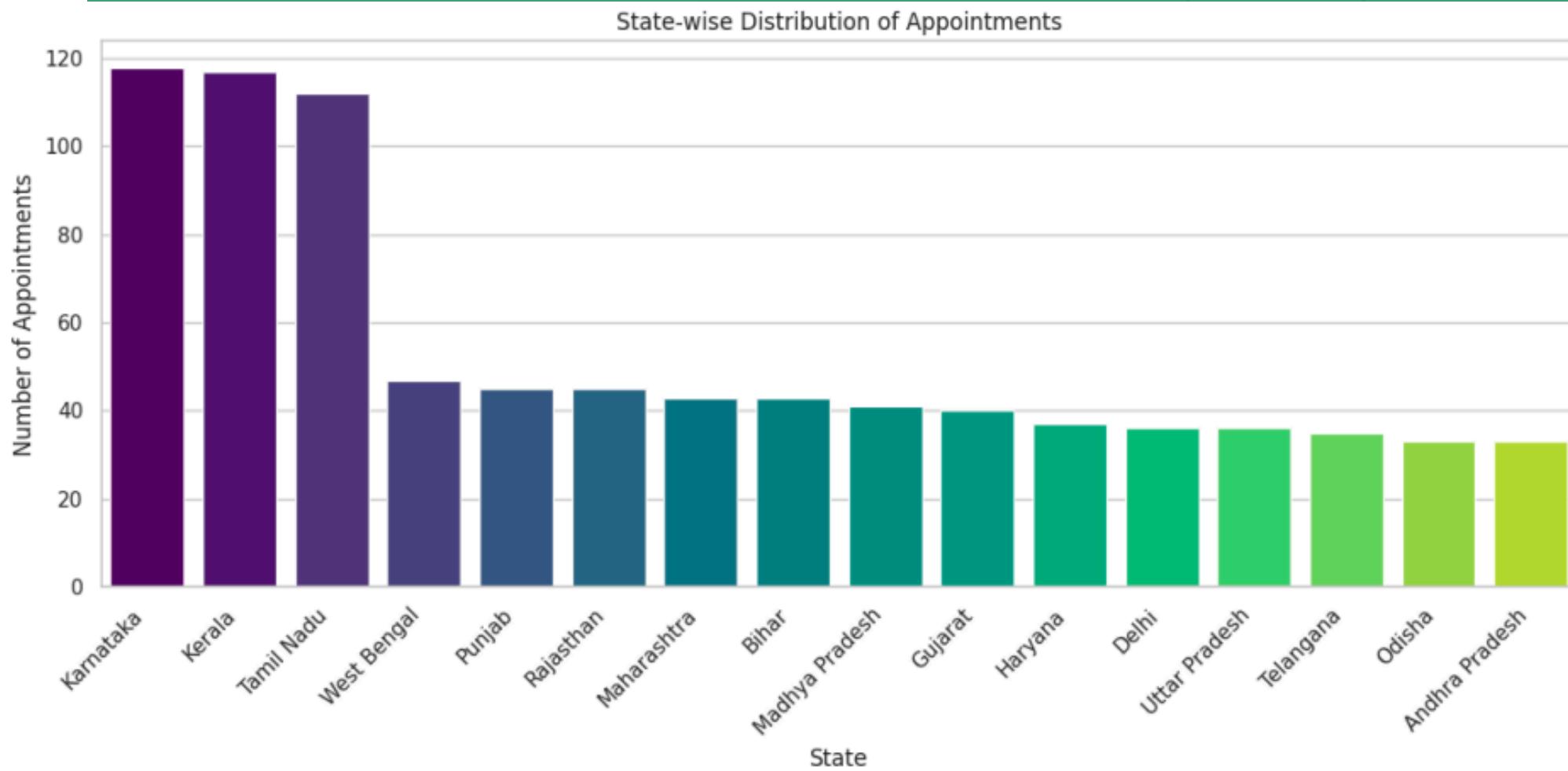
# Customer Geo-Mapping (State-wise)

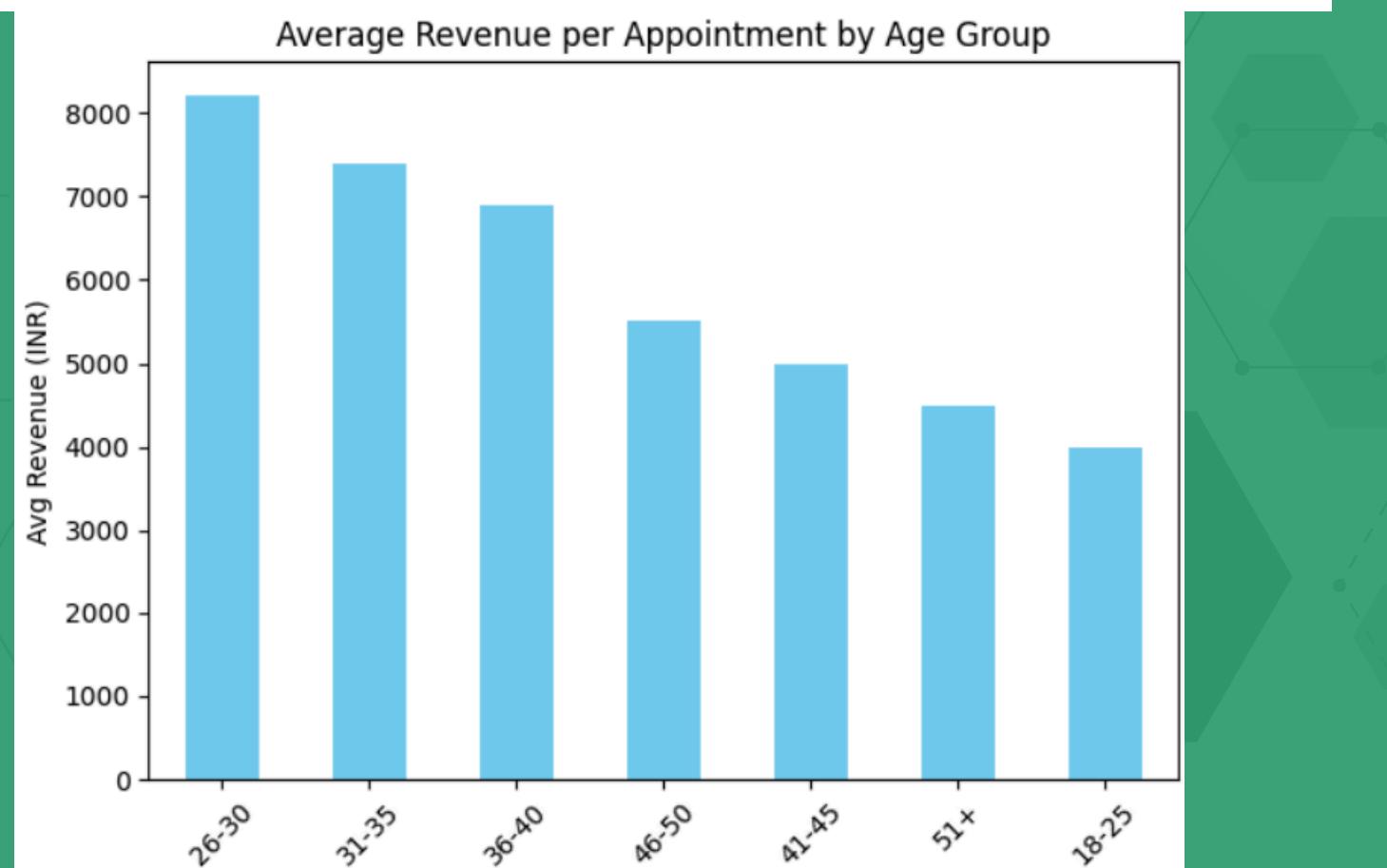
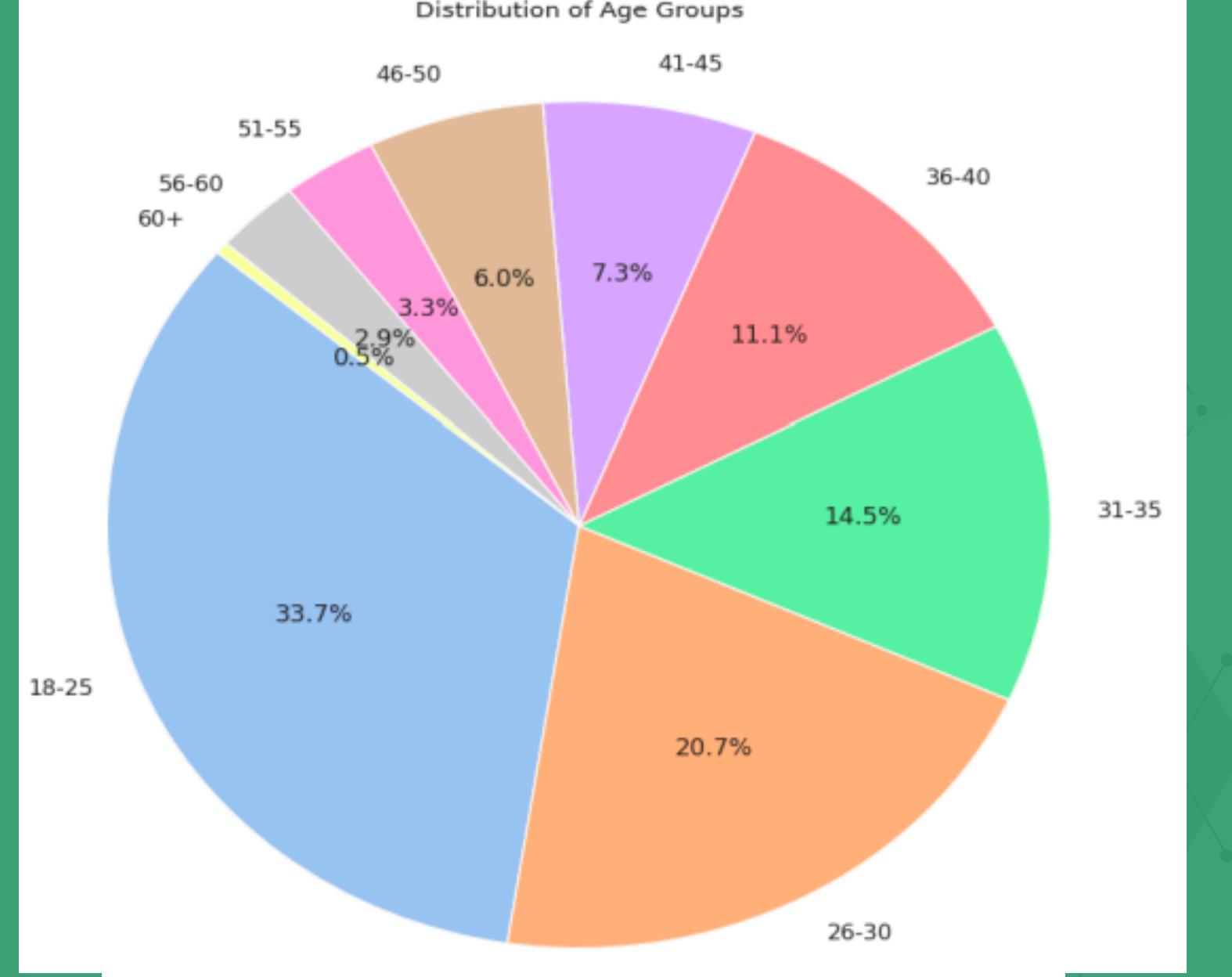
### Explanation

- This was done to analyze the geographic distribution of Ink Over Matter's clients across Indian states, and to understand the balance between urban and rural demand

### Results and Findings

- Karnataka, Kerala and Tamil Nadu dominate the figure with over 110 appointments in each state indicating positive resonance and regional traction due to geographic proximity/or local word-of-mouth/or better access to the studio in Bangalore
- Moderate opportunities exist through regional marketing and overnight travel-based clientele in West Bengal, Punjab and Rajasthan (~40-50 appointments).
- Low reach will come from Delhi, Uttar Pradesh, Odisha and Bihar (~30-40 appointments). Limited reach could be attributed to distance/lack of outreach to clients across the country.





## ANALYSIS 4

# Age group distribution and revenue

## Explanation

**Distribution of Age Groups (Pie Chart):** This chart shows the percentage share of different age groups among the studio's clients. It provides insights into which age categories are most common for booking tattoo appointments.

**Average Revenue per Appointment by Age Group (Bar Chart):** This chart presents the average revenue generated from each appointment segmented by age group

## Results and Findings

- The 18–25 age group forms the largest client base (33.7%), followed by 26–30 (20.7%) and 31–35 (14.5%). Together, these three groups (18–35) make up ~69% of all clients, indicating that tattoos are most popular among younger customers.
- The 26–30 group generates the highest average revenue per appointment followed by 31–25
- Interestingly, the 18–25 group, despite being the largest segment, spends less per appointment (~3,800 INR), indicating a preference for smaller or less expensive tattoos.

## ANALYSIS 5

# Client Retention Rate

## Explanation

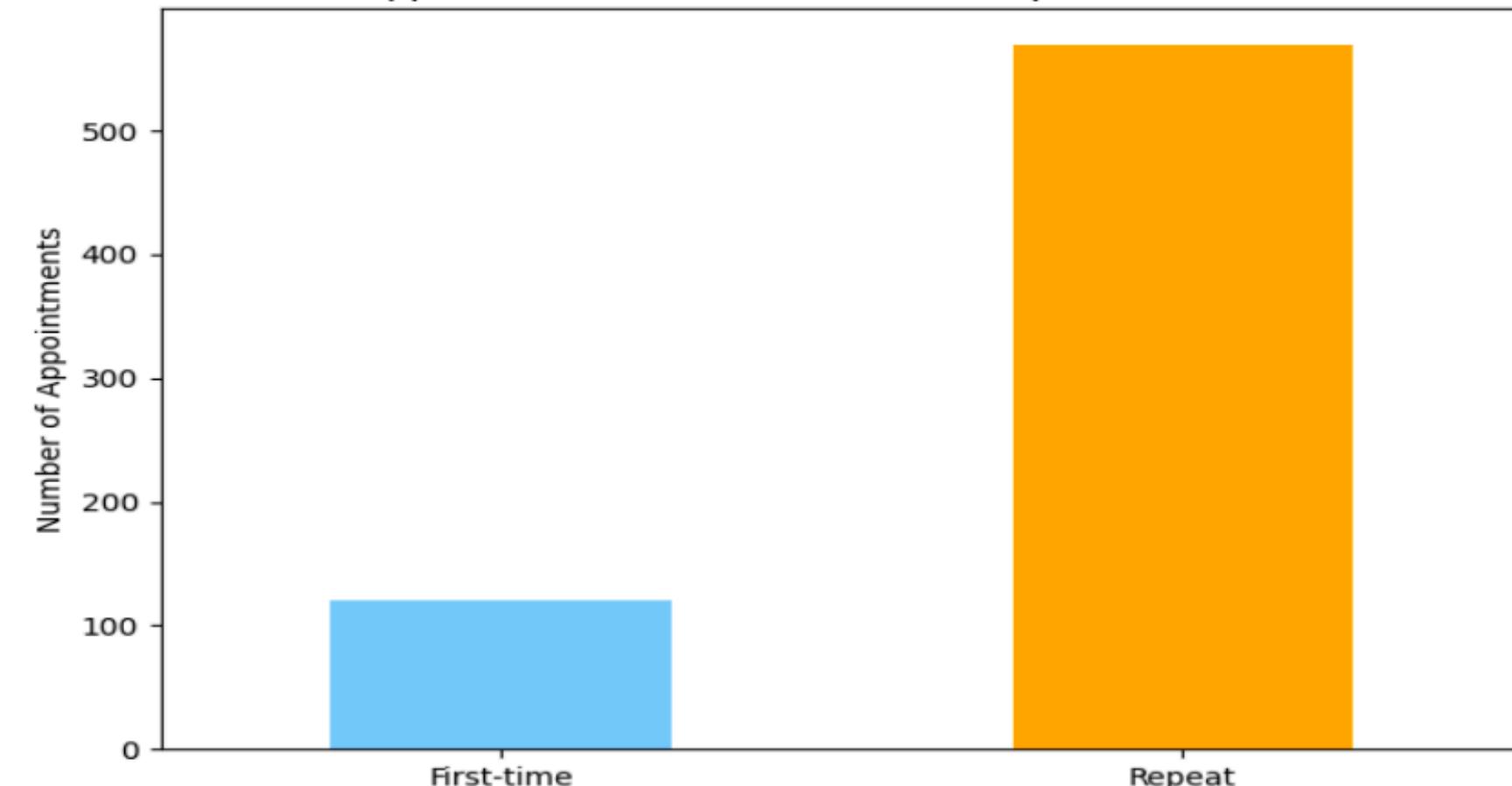
**Appointment Count (Top Bar Chart):** This shows how many total appointments come from new customers versus returning ones.

**Revenue Contribution (Bottom Bar Chart):** This shows the total revenue generated from each group, helping identify which segment drives more financial value for the studio.

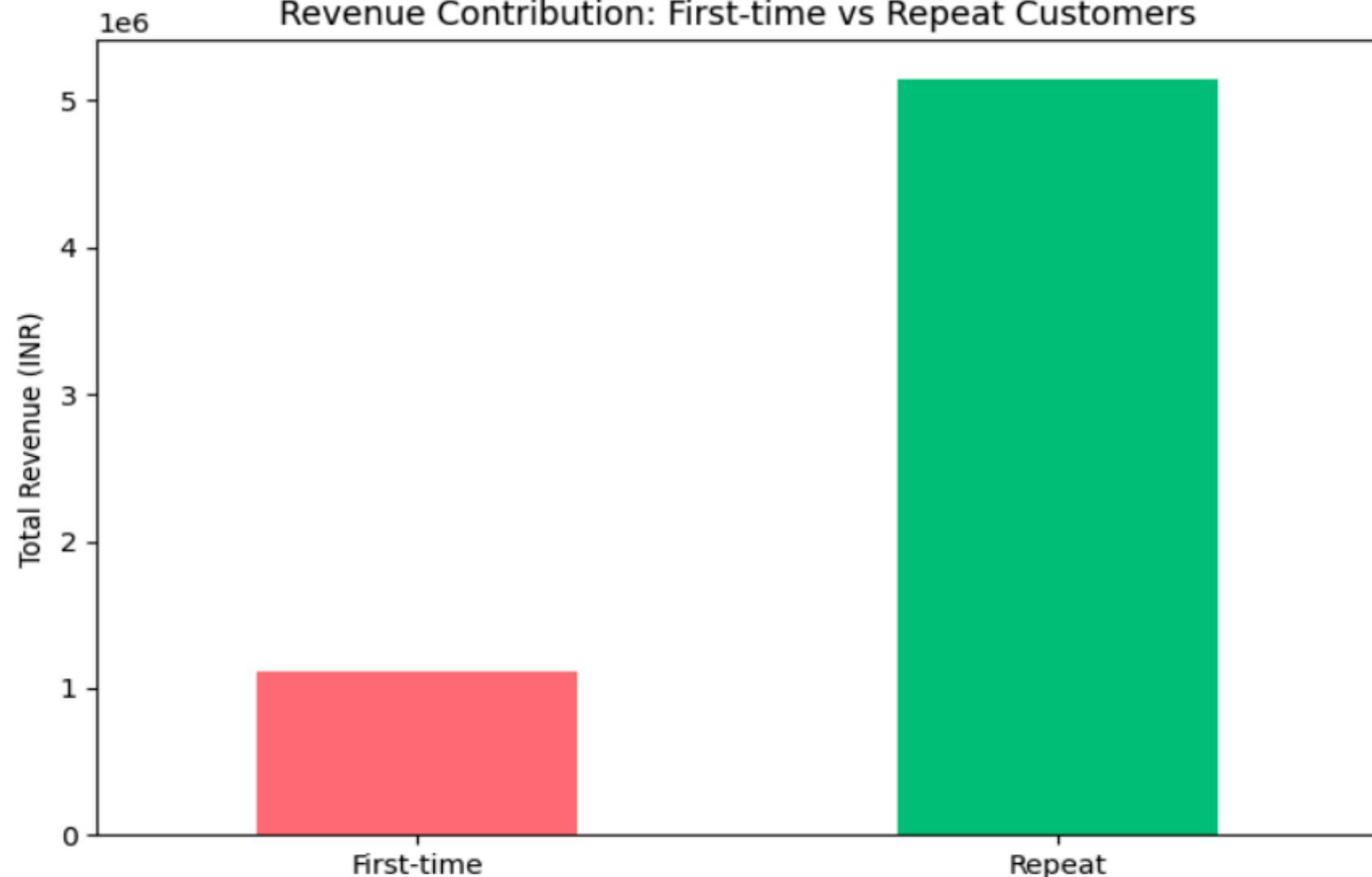
## Results and Findings

- Repeat customers account for the overwhelming majority of appointments (~550+), compared to around 120 from first-time customers. This indicates that once a customer gets a tattoo, they are very likely to return for additional tattoos, touch-ups, or extensions.
- The tattoo studio's business sustainability relies heavily on repeat customers. While first-time customers are essential for bringing in new clients, their financial contribution is much smaller compared to repeat clients.
- Repeat customers are the backbone of the studio's revenue model, driving the majority of both appointments and revenue. However, attracting first-time customers remains important, as they form the entry point into the loyal customer base. A strong balance of customer acquisition and retention strategies will ensure sustained growth.

Appointment Count: First-time vs Repeat Customers



Revenue Contribution: First-time vs Repeat Customers



# Recommendations

- 1 **Strengthen Digital Presence** – Build out the [website](#) further with online booking, consultation forms, and Google Business/SEO. Post consistently on Instagram with tattoo showcases, behind-the-scenes clips, and client stories
- 2 **Seasonal Campaigns** – Target January, March–May, and July with discounts, special packages, or festival-themed promotions, since these are proven high-demand months.
- 3 **Regional Marketing in South India** – Karnataka, Kerala, and Tamil Nadu are the core markets. Use local language ads, collaborations with influencers, or tie-ups with travel outlets to attract “tattoo-tourism”.
- 4 **Promote High-Value Tattoo Types** – Highlight sleeves, cover-ups, and large tattoos on thighs, backs, and chests in marketing since they generate the most revenue.
- 5 **Loyalty & Referral Programs** – Build on the 80% revisit rate by rewarding repeat clients (touch-ups, discounts, priority booking) and incentivizing referrals.
- 6 **Diversify Revenue Streams** – Introduce tattoo aftercare kits, branded merchandise, and perhaps design consultation fees to reduce dependence on tattoo sessions alone.
- 7 **Lighten Operational Load** – Delegate repetitive tasks to a chatbot (e.g., FAQs, care instructions), use online forms to pre-qualify clients, and consider hiring an intern to free the founder’s time for high-value work.
- 8 **Data-Driven Customer Segmentation** – Target the 26–30 age group with premium packages, while designing affordable, entry-level tattoos for the 18–25 bracket to build long-term loyalty.

# Thank You