

# Business Analyst Intern Assignment

Submitted by: Hemaris MP

Email ID: hemharis75@gmail.com

Contact Number: +91 9080943305

Tool Used: PYTHON [Jupyter Notebook – 7.2.2]

LinkedIn URL : [LINK](#)

Date of Submission: 21 / 06 / 2025.

## Question 1 (30 Marks): Sales Analysis

### Part 1: Sales and Profitability Analysis

- Step 1: Merging datasets on Order ID
- Step 2: Total Sales (Amount) by Category
- Step 3: Average Profit per Order by Category
- Step 4: Total Profit Margin per Category
- Step 5: Top and Bottom Performing Categories

Click on this link: [Drive Link](#)

### Part 2: Target Achievement Analysis

- Step 1: Month-over-Month % Change in Furniture Category Sales Target
- Step 2: Identify High Fluctuation Months

Click on this link: [Drive Link](#).

## Strategy Suggestions:

> Category performance varies due to market dynamics, operational efficiency, and brand efforts. Detailed data investigation is vital for strategy, as these reasons remain hypothetical.

### General Factors Affecting Performance:

**Market Dynamics:** Demand, competitive pricing, and the overall market landscape significantly influence success. High demand pulls sales; aggressive pricing can reduce margins.

**Operational Efficiency:** Seamless management from sourcing to delivery. Efficient COGS, streamlined processes, and minimal returns optimize profitability.

**Brand & Marketing:** Strong brand reputation, effective marketing, and consistent product quality build trust and drive purchasing. Strategic promotions also influence behavior.

**Part 3: Regional Performance Insights**

- Top 5 States by Order Count:
- > [State names, Sales, Average Profit]

Results for 'Madhya Pradesh':
Total Sales (Amount): 105140.00
Average Profit: 16.33
Results for 'Maharashtra':
Total Sales (Amount): 95348.00
Average Profit: 21.30
Results for 'Gujarat':
Total Sales (Amount): 21058.00
Average Profit: 5.34
Results for 'Delhi':
Total Sales (Amount): 22531.00
Average Profit: 40.36
Results for 'Rajasthan':
Total Sales (Amount): 21149.00
Average Profit: 16.99

- Analysis of Regional Disparities:
- > [Brief findings] - [Drive Link](#)

- > Improvement Recommendations:
- .Prioritization for Improvement**

Based on both total profit and average profit per order, the following regions and cities should be prioritized for improvement:

1. **Tamil Nadu - Chennai:** This city has the highest negative total profit and the lowest average profit per order, indicating significant underlying issues.
2. **Punjab - Chandigarh:** Also shows a substantial negative total profit and a very low average profit per order.
3. **Gujarat - Ahmedabad & Rajasthan - Jaipur:** Both cities have significant negative total profits and low average profits, requiring attention.
4. **Andhra Pradesh - Hyderabad & Bihar - Patna:** While their negative profits are comparatively smaller, they still indicate areas that need improvement.

State	City	Total Sales	Total Profit	Average Profit Per Order
Tamil Nadu	Chennai	6087	-2216	-88.64
Punjab	Chandigarh	12279	-1153	-25.62
Rajasthan	Jaipur	10076	-753	-17.11
Gujarat	Ahmedabad	14230	-880	-14.19
Andhra Pradesh	Hyderabad	13256	-496	-11.81
Bihar	Patna	12943	-321	-5.18
Jammu and Kashmir	Kashmir	10829	8	0.16
Nagaland	Kohima	11903	148	3.29
Uttar Pradesh	Lucknow	5502	156	4.11
Maharashtra	Mumbai	61867	1637	7.91

## Question 2 (10 Marks): App Exploration

### ⇒ Top 5 Effective/User-Friendly Features:

1. **Easy Sign-Up** – The registration process is very simple and quick, which helps new users start using the app without any confusion.
2. **Automatic Savings** – It saves small amounts from daily spending and invests in digital gold, which is very helpful for people who find it hard to save regularly.
3. **Simple Design** – The app looks neat and is easy to use, even for those who are not very good with technology.
4. **Live Gold Price Updates** – It shows the current gold price, which helps users know the value of their savings in real-time.
5. **Fun Features** – The app has rewards like scratch cards and daily saving challenges that make using the app more exciting.

### Areas for Improvement:

6. **More Investment Options Needed** – Right now, the app only offers digital gold. Adding options like mutual funds or fixed deposits would give users more choices.
7. **Better Customer Support** – The support system could be improved by adding live chat or faster help responses.
8. **Lack of Learning Material** – The app could include some simple tips or guides to help users learn about saving and investing.
9. **Too Many Notifications** – It sends a lot of alerts which can be annoying. Giving users the option to control notifications would be better.
10. **No Filter in Transaction History** – It would be helpful if users could filter their past transactions by date or type to track their savings better.



## Question 3 (10 Marks): Product Exploration

### New Business Opportunities:

#### Micro-Investing Beyond Gold (Diversified Portfolio):

- **Keywords:** Diversification, small investments, ETFs, Mutual Funds, Debt Funds.
- **Seamless Integration:** Extend the existing "round-up" or "daily saving" model to allow users to invest in curated, low-cost Exchange Traded Funds (ETFs) or a selection of beginner-friendly mutual funds. This would enable users to easily diversify their savings beyond gold, catering to different risk appetites and financial goals.
- **Value Proposition:** Offers users more investment avenues, potentially higher returns, and exposure to various asset classes with the same ease of use they've come to expect from Jar.

#### Credit Building & Micro-Loans:

- **Keywords:** Credit score, small loans, financial inclusion, responsible borrowing.
- **Seamless Integration:** For users consistently saving with Jar, introduce a feature that helps build a credit score by reporting their consistent saving habits to credit bureaus (with user consent). Subsequently, offer small, automated micro-loans with transparent terms based on their saving history and app engagement. Jar has already started offering personal loans, so this is a natural extension.
- **Value Proposition:** Addresses the credit needs of its user base, especially those new to formal credit, fostering financial inclusion and creating a new revenue stream. Automation can simplify the application and disbursement process.

#### Automated Expense Tracking & Budgeting:

- **Keywords:** Personal finance management, expense analysis, smart budgeting, bill reminders.
- **Seamless Integration:** Utilize Jar's existing ability to read SMS transactions (with user consent) to offer automated expense categorization and spending insights. This could include personalized budgeting tips and reminders for bill payments.
- **Value Proposition:** Helps users gain better control over their spending, reinforcing good financial habits and making the app a central hub for their daily finances.

## Leveraging Jar's Strengths

- Jar's core strength in **automation** can seamlessly extend to new services like diversified investments and loan repayments. Maintaining its **user-friendly design** is crucial for intuitive integration of these new features. The app's **established credibility** and user trust are invaluable, encouraging adoption of new financial products. Furthermore, **data-driven personalization** can tailor offerings, deepening Jar's value for each user.
- By expanding, Jar can evolve into a comprehensive **financial wellness platform**, becoming a true "digital financial companion" for users across India.

Thank you

HEMARIS MP.