

AstroSage Call Centre Data Analysis – Objective and Subjective Questions

Prepared By: Manoj R K

B.tech in CSE-2025

Location: Mysore, India

Introduction:

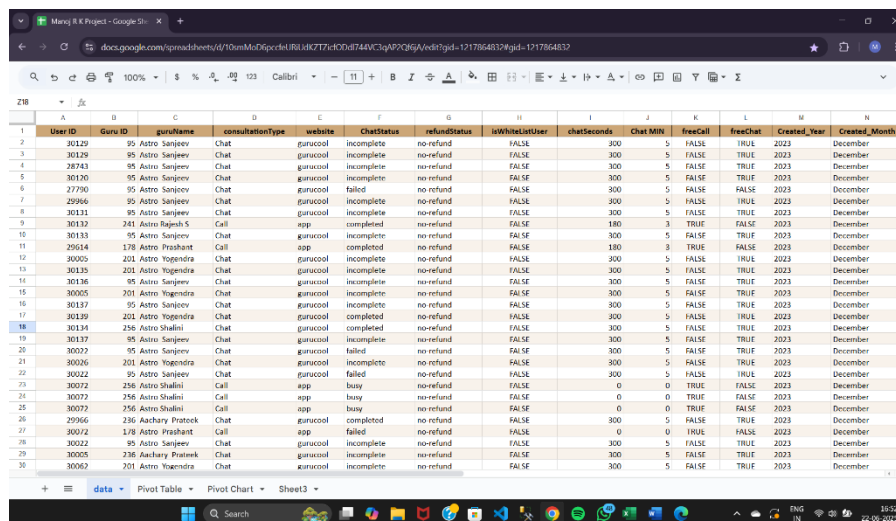
The AstroSage Call Center Dashboard project focuses on analyzing key performance indicators (KPIs) using real operational data. The data included user interactions, astrologer performance, consultation types, call duration, satisfaction ratings, and revenue.

We used Google Sheets to clean the data, build pivot tables, create pivot charts, and design a dashboard. Slicers were used for interactivity, allowing management to filter the data by consultation type, guru name, and date range. The objective was to deliver insights that could help improve operations, enhance customer satisfaction, and support data-driven decision-making.

Objective Questions:

Q1. What is the total number of tables present in the data?

Only one table was present in the dataset, combining all user-call interactions.



	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	User ID	Guru ID	guruName	consultationType	website	ChatStatus	refundStatus	isWhiteListUser	chatSeconds	Chat MIN	freeCall	freeChat	Created_Year	Created_Month
2	30129	95	Astro Sanjeev	Chat	gurucool	incomplete	no-refund	FALSE	300	5	FALSE	TRUE	2023	December
3	30129	95	Astro Sanjeev	Chat	gurucool	incomplete	no-refund	FALSE	300	5	FALSE	TRUE	2023	December
4	28743	95	Astro Sanjeev	Chat	gurucool	incomplete	no-refund	FALSE	300	5	FALSE	TRUE	2023	December
5	30120	95	Astro Sanjeev	Chat	gurucool	incomplete	no-refund	FALSE	300	5	FALSE	TRUE	2023	December
6	27790	95	Astro Sanjeev	Chat	gurucool	failed	no-refund	FALSE	300	5	FALSE	FALSE	2023	December
7	29966	95	Astro Sanjeev	Chat	gurucool	incomplete	no-refund	FALSE	300	5	FALSE	TRUE	2023	December
8	30131	95	Astro Sanjeev	Chat	gurucool	incomplete	no-refund	FALSE	300	5	FALSE	TRUE	2023	December
9	30132	241	Astro Rajesh S	Call	app	completed	no-refund	FALSE	180	3	TRUE	FALSE	2023	December
10	30133	95	Astro Sanjeev	Chat	gurucool	incomplete	no-refund	FALSE	300	5	FALSE	TRUE	2023	December
11	29514	178	Astro Prashant	Call	app	completed	no-refund	FALSE	180	3	TRUE	FALSE	2023	December
12	30005	201	Astro Yogendra	Chat	gurucool	incomplete	no-refund	FALSE	300	5	FALSE	TRUE	2023	December
13	30135	201	Astro Yogendra	Chat	gurucool	incomplete	no-refund	FALSE	300	5	FALSE	TRUE	2023	December
14	30136	95	Astro Sanjeev	Chat	gurucool	incomplete	no-refund	FALSE	300	5	FALSE	TRUE	2023	December
15	30005	201	Astro Yogendra	Chat	gurucool	incomplete	no-refund	FALSE	300	5	FALSE	TRUE	2023	December
16	30137	95	Astro Sanjeev	Chat	gurucool	incomplete	no-refund	FALSE	300	5	FALSE	TRUE	2023	December
17	30139	201	Astro Yogendra	Chat	gurucool	completed	no-refund	FALSE	300	5	FALSE	TRUE	2023	December
18	30134	256	Astro Shalini	Chat	gurucool	completed	no-refund	FALSE	300	5	FALSE	TRUE	2023	December
19	30137	95	Astro Sanjeev	Chat	gurucool	incomplete	no-refund	FALSE	300	5	FALSE	TRUE	2023	December
20	30022	95	Astro Sanjeev	Chat	gurucool	failed	no-refund	FALSE	300	5	FALSE	TRUE	2023	December
21	30026	201	Astro Yogendra	Chat	gurucool	incomplete	no-refund	FALSE	300	5	FALSE	TRUE	2023	December
22	30022	95	Astro Sanjeev	Chat	gurucool	failed	no-refund	FALSE	300	5	FALSE	TRUE	2023	December
23	30072	256	Astro Shalini	Call	app	busy	no-refund	FALSE	0	0	TRUE	FALSE	2023	December
24	30072	256	Astro Shalini	Call	app	busy	no-refund	FALSE	0	0	TRUE	FALSE	2023	December
25	30072	256	Astro Shalini	Call	app	busy	no-refund	FALSE	0	0	TRUE	FALSE	2023	December
26	29966	236	Aachary Proteek	Chat	gurucool	completed	no-refund	FALSE	300	5	FALSE	TRUE	2023	December
27	30072	178	Astro Prashant	Call	app	failed	no-refund	FALSE	0	0	TRUE	FALSE	2023	December
28	30022	95	Astro Sanjeev	Chat	gurucool	incomplete	no-refund	FALSE	300	5	FALSE	TRUE	2023	December
29	30005	236	Aachary Proteek	Chat	gurucool	incomplete	no-refund	FALSE	300	5	FALSE	TRUE	2023	December
30	30062	201	Astro Yogendra	Chat	gurucool	incomplete	no-refund	FALSE	300	5	FALSE	TRUE	2023	December

Q2. What is the total number of columns present in the data?

The original dataset had **35** columns, and after cleaning and creating new derived columns, the final cleaned data contains **23** columns.

Q3. The data consists of some inconsistent and missing values, so ensure that the data used for further analysis is cleaned.

1. Deleted Unnecessary Columns

- Removed columns such as **statementEntryId, callChannel, callIvrType, updatedAT, __v, astrologerCallStatus, userCallStatus** and **queue** which were not relevant to analysis or insights.
- This helped simplify the dataset and improve focus on relevant metrics

2. Data Standardization

- Ensured **Created_Date, Created_Month, Created_Year, Created_Time** were formatted properly using date functions.
- Unified naming across columns for consistency (e.g., guruName, uid, gid).

3. Removed Duplicates

- Checked for and removed duplicate entries using the id column to prevent data distortion.
- The total rows consists of the raw data is **28027**, after removing duplicates, the data consists of **28010** rows :- Click on **Data > Data cleanup > Remove duplicates**.

4. Maintained Required Columns

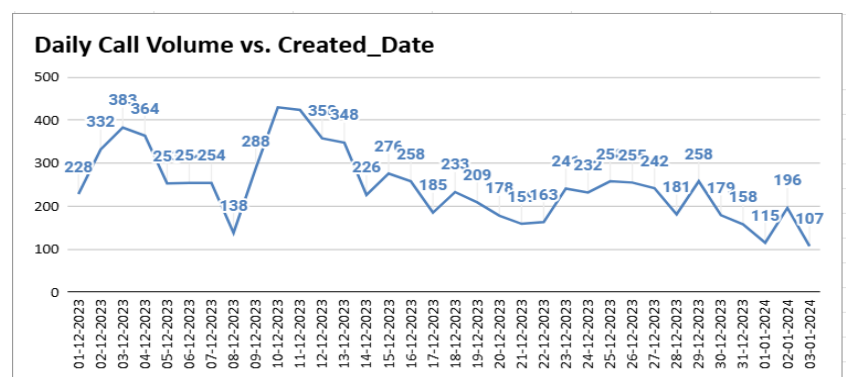
- Retained only relevant fields needed for KPIs, charts, and dashboard analysis (e.g., id, uid, gid, guruName, chatSeconds, rating, netAmount).

4)What is the change in daily call volume day by day and also find the average daily call volume.

The average daily call volume is 246.

Formula used : =average(call volume column)

Created_Date	Daily Call Volume	Change in call Volume
01-12-2023	228	
02-12-2023	332	104
03-12-2023	383	51
04-12-2023	364	-19
05-12-2023	253	-111
06-12-2023	254	1
07-12-2023	254	0
08-12-2023	138	-116
09-12-2023	288	150
10-12-2023	430	142
11-12-2023	424	-6
12-12-2023	358	-66
13-12-2023	348	-10
14-12-2023	226	-122
15-12-2023	276	50
16-12-2023	258	-18
17-12-2023	185	-73
18-12-2023	233	48
19-12-2023	209	-24
20-12-2023	178	-31
21-12-2023	159	-19
22-12-2023	163	4
23-12-2023	241	78
24-12-2023	232	-9
25-12-2023	242	10
26-12-2023	255	13
27-12-2023	242	-13
28-12-2023	181	-61
29-12-2023	258	77
30-12-2023	179	-79
31-12-2023	158	-21
01-01-2024	115	-43
02-01-2024	196	81
03-01-2024	107	-89



5) Which months experienced the highest and lowest call volumes?

There are only 34 days given, which is for only two months, December and January. 31 days of December and only 3 days of January.

On 10/12/23, there was the highest call volume, i.e., **430**.

Formula used: =Max(call volume column)

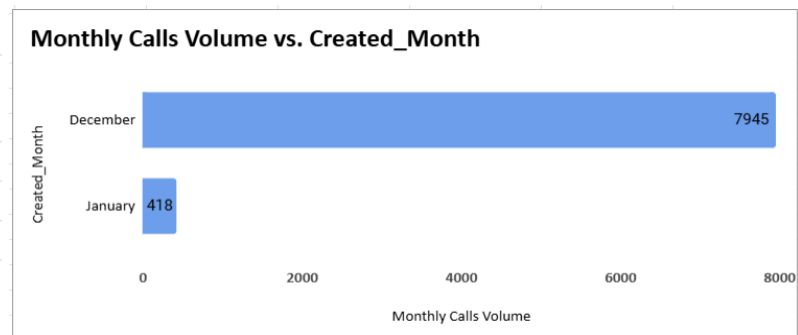
On 03/01/2024, there was the lowest call volume, i.e., **107**.

Formula used : =Min(call volume column)

December – Highest call volume.

January – Lowest call volume

Created_Month	COUNTA of CallSid
December	7945
January	418
Grand Total	8363



6) What is the total operational cost for that month?

December

- Amount = ₹202,239.21
- Astrologers' Earnings = ₹93,786.16
Operational Cost (Dec) = ₹202,239.21 – ₹93,786.16 = ₹108,453.05

January

- Amount = ₹11,826.69
- Astrologers' Earnings = ₹5,360.41
Operational Cost (Jan) = ₹11,826.69 – ₹5,360.41 = ₹6,466.28

Total Operational Cost

= ₹108,453.05 + ₹6,466.28 = ₹114,919.33

Final Answer: ₹114,919.33 is the total operational cost across December and January.

7)What is the average number of calls handled per agent per day?

Total Calls: 8363

Function Used: =COUNTIF(data!D:D,data!\$D\$)

Number of days: 34

Function Used: =COUNT(UNIQUE(data!O:O))

Number of agents(Guru)- 152

Function used: =COUNTA(UNIQUE(data!A1:A27950))

First, we have to find the average number of calls per day.

Average number of calls per day = Total calls / Number of days

$$= 8363 / 34$$

$$= 245.97$$

Now find the average number of calls handled per agent per day.

Average number of calls handled by per agent per day = Average number of calls per day / Number of Agent

$$= 245.97 / 150$$

$$= 1.63$$

So we can say that approx. 2 calls are handled per person per day.

8)How many repeat callers are there, and what percentage of total calls do they represent?

User ID	COUNTA of CallSid
437	9
507	1
511	2
543	6
787	20
1103	4
1105	6
1233	1
1520	5
1555	2
1935	6
2044	15
2228	4
2329	10
2347	4
2394	10
2429	6
2727	2
2735	20
2878	1
2887	7
2958	4
2986	11
3100	6
3473	1
3515	10

With the help of this pivot table, we can find the total number of callers.

Total number of callers = 3629

Formula used: =COUNT()

Now we have to find the repeater callers. The callers who use the call service more than once,

For that, we can apply the filter on the pivot table in the user ID section, which will show the callers who called more than once.

Repeater callers = 1267

Formula used: =COUNT()

Single time callers (Non repeaters) = Total callers – Repeater callers

Non-Repeater callers = 2362

PERCENTAGE OF TOTAL CALLS –

Total number of calls = 8491 (count of calls)

The caller placed 6105 repeated calls.

Repeated calls = 6105 – 1st call placed by callers

= 6105 – 1267 (count of repeated callers)

Repeated calls = 4838

Percentage of repeated calls = (Repeated calls *100)/Total calls

= (4838*100/8491)

Percentage of repeated calls = 56.97%

9)What are the total sales generated by the call centre for each product category?

<i>consultationType</i>	SUM of amount
Call	₹ 168,520.62
Chat	₹ 45,494.68
Complementary	₹ 0.00
public_live_Call	₹ 50.60
Grand Total	₹ 214,065.90

Consultation Type is considered a Product category. We can say that the call is the highest category compared to the others.

10)How many calls were made for each user ID and guru ID?

Guru ID	User ID	COUNTA of User ID
-	8	31241
		31284
-	12	4529
		4534
		30643
		32376
		32856
		33005
		33017
		38599
		40059
		41651
-	13	2727
		37914
		39434
		40903
		40978
-	14	13203
		17696
		19063
		20046

The list is very long, as 3629 users used the call service, and they made 8363 calls in total.

Formula used: =COUNTIF(data!H:H,"Call")(To measure total calls)

=COUNT()(To measure users)

With the help of a pivot table, we can see the calls made for each User ID and Guru Name.

11)What is the correlation between call duration and customer satisfaction?

The correlation between call duration and customer satisfaction is -0.06455340616

Formula used : =CORREL(data!\$AF\$2:\$AF\$27951,data!\$AG\$2:\$AG\$27951)

There is **almost no linear relationship** between how long a call lasts and how satisfied the customer is.

12) Which guru has the highest and lowest customer satisfaction scores?

If we take the average of all gurus rating then **Tarot Rittika** got the lowest satisfaction score but she only consulted once and only one user rated her. While **Tarot Rittika** got the highest average rating but she consulted only two users with chat service.

Guru Name	rating
Tarot Mystical	7.50
Astro Pujaa Rai	7.50
Astro Reema	6.56
Acharya Divyansh	0.4
Astro K Ojha	0.1
Tarot Rittika	0

13) What is the average customer satisfaction score by month?

There are only two months given in the data, i.e., December 2023 and January 2024.

Created_Month	AVERAGE of Rating
January	2.7
December	2.9
Grand Total	2.934413938

December - 2.9

January - 2.7

14) How many categorical columns are there in the data? [Search about categorical and continuous data, and try to answer this question]

Categorical Columns	user, uid, guru, guruName, gid, consultationType, region, userCallStatus, callStatus, Created_Month, isWhiteListUser, website - 12
Continuous Columns	chatSeconds, rating, amount, netAmount, astrologersEarnings, and Created_Year -6

Subjective Questions

1. Should the investment be used to hire more agents, improve training programs, or upgrade call center technology?

1) Hiring More Agents

Created_Date	Daily Call Volume
01-12-2023	228
02-12-2023	332
03-12-2023	383
04-12-2023	364
05-12-2023	253
06-12-2023	254
07-12-2023	254
08-12-2023	138
09-12-2023	288
10-12-2023	430
11-12-2023	424
12-12-2023	358
13-12-2023	348
14-12-2023	226
15-12-2023	276
16-12-2023	258
17-12-2023	185
18-12-2023	233
19-12-2023	209
20-12-2023	178
21-12-2023	159
22-12-2023	163
23-12-2023	241
24-12-2023	232
25-12-2023	258

Average number of calls per day = 245.97 (Formula : =AVERAGE())

ChatStatus	COUNTA of User	CallsStatus	COUNTA of User
completed	5535	busy	1270
failed	7255	completed	3450
incomplete	6641	failed	1168
pending	47	incomplete	875
started	35	no-answer	1728
Grand Total	19513	Grand Total	8491

% of calls gets complete = 40.63 % {Formula= (Completed calls * 100)/ total calls}

The call centre receives approximately 250 calls per day, but only 40.63% of calls are completed. To manage the workload, investment is needed in hiring agents.

2) Improve training programs

Rating	COUNTA of User
1	2199
2	4323
3	4402
4	2129
5	2165
6	1829
7	1824
8	1882
Grand Total	20753

Only 37.13% of users are satisfied with the service.

Total users = 20753

Satisfied user (Rating-5,6,7,8) = 37.10 %

(formula- =(SUM(satisfied users)*100/total users))

Unsatisfied user (Rating-1,2,3,4) = 62.89 %

I think the investment should be used to improve the training program.

3) Upgrade call center technology

website	AVERAGE of Rating	website	COUNTA of Rating
app	3.500706668	app	7783
dashboard	4.5	dashboard	2
gurucool	2.716327136	gurucool	20224
Grand Total	2.934413938	Grand Total	28009

consultationType	COUNTA of amount
Call	8491
Chat	19513
Complementary	2
public_live_Call	3
Grand Total	28009

69.96% of users use the chat service, primarily through the Gurucool platform, which has an average rating of just 2.72, indicating significant user dissatisfaction. This highlights a clear need for technology upgrades to improve service quality, user experience, and retention. Investing in tech will enhance system performance and satisfaction, though potential risks like implementation delays and training requirements should be planned for and mitigated.

2)What are the potential risks of each investment option (hiring, training, technology upgrades), and how can they be mitigated?

Name the chart/spreadsheet function you will use for solving the problem.

1) HIRING

Possible Problems (Risks):

1. High hiring cost – The company has to spend money on hiring, like paying agencies or job platforms.
2. Training cost wasted – If the new employee doesn't perform well, the time and money spent on training them goes to waste.
3. Leaves quickly – If the person doesn't stay long, it wastes company time and effort.

4. Wrong skills – If the person hired doesn't have the right skills, it may lead to poor work or delays.
5. Bad behavior – If the new hire behaves badly or unprofessionally, it can affect the company's image.

Mitigating These Problems (Solutions):

1. Take more interview rounds to better check their skills and behavior.
2. Clearly explain the job role and expectations before hiring.
3. Check if they match the company culture to make sure they'll stay longer.

2) TRAINING

Only 37.10% of users are satisfied with the service.

Total users = 20753

Satisfied user (Rating-5,6,7,8) = 37.10 %

(formula- =(SUM(satisfied users)*100/total users))

Unsatisfied user (Rating-1,2,3,4) = 62.89 %

Rating	COUNTA of User
1	2199
2	4323
3	4402
4	2129
5	2165
6	1829
7	1824
8	1882
Grand Total	20753

Possible Problems (Risks):

1. High cost – Hiring outside trainers or giving paid certifications can be expensive.
2. Employees may leave – After learning new skills, some employees may switch jobs for better offers.
3. Training may not help – If the training is not related to the actual work, it won't improve performance.

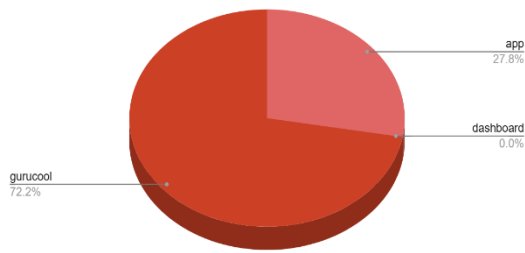
Mitigating These Problems (Solutions):

1. Use in-house training where possible, and check if the cost is worth the results.
2. Build a positive work environment and give chances to grow within the company.

Use contracts or agreements so employees stay for some time after training.

3) TECHNOLOGY UPGRADES:

COUNTA of User



website	COUNTA of Rating
app	7783
dashboard	2
gurucool	20224
Grand Total	28009

website	AVERAGE of Rating
app	3.500706668
dashboard	4.5
gurucool	2.716327136
Grand Total	2.934413938

69.8% of users use the chat service, primarily through the Gurucool platform, which has an average rating of just 2.72, indicating significant user dissatisfaction. This highlights a clear need for technology upgrades to improve service quality, user experience, and retention. Investing in tech will enhance system performance and satisfaction, though potential risks like implementation delays and training requirements should be planned for and mitigated.

Possible Problems (Risks):

1. High cost – Upgrading systems can be expensive. It includes buying software, licenses, hardware, and training.
2. Need for training – Employees may need help learning how to use the new systems.
3. May not work as expected – The new tools might not perform well or might need more resources (like faster internet or better devices).
4. Risk of losing data – Data might get lost or corrupted during the upgrade.

How to Reduce These Problems (Solutions):

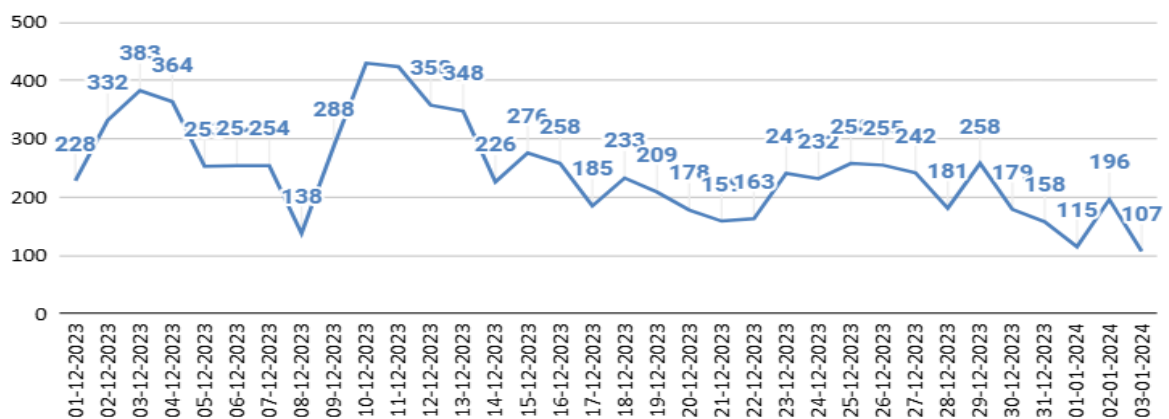
1. Make a clear budget plan before starting the upgrade to avoid overspending.
2. Train employees properly so they can use the new tools with confidence.
3. Back up all important data before making any changes, so nothing is lost.

3)How does AstroSage's call center performance compare to AstroGuru's average call volume, customer satisfaction, and agent performance?

Will you use any aggregation function or a visualization here to solve the problem?

Created_Date	Daily Call Volume	Change in call Volume
01-12-2023	228	
02-12-2023	332	104
03-12-2023	383	51
04-12-2023	364	-19
05-12-2023	253	-111
06-12-2023	254	1
07-12-2023	254	0
08-12-2023	138	-116
09-12-2023	288	150
10-12-2023	430	142
11-12-2023	424	-6
12-12-2023	358	-66
13-12-2023	348	-10
14-12-2023	226	-122
15-12-2023	276	50
16-12-2023	258	-18
17-12-2023	185	-73
18-12-2023	233	48
19-12-2023	209	-24
20-12-2023	178	-31
21-12-2023	159	-19
22-12-2023	163	4
23-12-2023	241	78
24-12-2023	232	-9
25-12-2023	246	14

Daily Call Volume vs. Created_Date



The call center receives around **246 calls per day**, and there are **151 gurus available** to handle them.

However, out of **8,363 total calls**, only **3,450 were completed**, which is just **40.63%**.

This means **59.37% of users didn't get their call session**, even after booking it.

This low completion rate is one of the main reasons why the **average rating for the call service is only 3.5**.

consultationType	AVERAGE of Rating
Call	3.501589919
Chat	2.687439143
Complementary	4.5
public_live_Call	3
Grand Total	2.934413938

If astrologers' ratings improve, the overall company rating will also improve.

Since **78.69% of the company's net income** and **78.44% of astrologers' earnings** come from the **Call service**, it's clearly the key revenue source.

So, **investing in training programs** to improve astrologer performance would be a **smart and strategic move** to maintain and grow this success

consultationType	SUM of netAmount	SUM of astrologersEarnings
Call	₹ 168,442.04	₹ 77,799.44
Chat	₹ 45,494.68	₹ 21,338.64
Complementary	₹ 0.00	₹ 0.00
public_live_Call	₹ 50.60	₹ 8.49
Grand Total	₹ 213,987.32	₹ 99,146.57

Created_Date	SUM of astrologersEarning	SUM of netAmount
01-12-2023	₹ 2,653.46	₹ 5,518.78
02-12-2023	₹ 1,487.24	₹ 3,170.32
03-12-2023	₹ 1,324.93	₹ 2,762.05
04-12-2023	₹ 3,887.30	₹ 7,808.00
05-12-2023	₹ 2,201.09	₹ 4,619.55
06-12-2023	₹ 2,443.79	₹ 5,296.03
07-12-2023	₹ 3,721.03	₹ 7,826.75
08-12-2023	₹ 2,234.47	₹ 4,664.63
09-12-2023	₹ 2,544.70	₹ 5,189.05
10-12-2023	₹ 3,292.66	₹ 7,049.17
11-12-2023	₹ 2,507.97	₹ 5,493.18
12-12-2023	₹ 1,645.22	₹ 3,593.43
13-12-2023	₹ 2,559.93	₹ 5,603.56
14-12-2023	₹ 2,908.66	₹ 6,951.02
15-12-2023	₹ 5,547.34	₹ 11,884.58
16-12-2023	₹ 5,060.17	₹ 11,107.48
17-12-2023	₹ 3,252.14	₹ 6,983.00
18-12-2023	₹ 2,090.16	₹ 4,580.30
19-12-2023	₹ 5,963.26	₹ 12,970.29
20-12-2023	₹ 4,821.97	₹ 10,530.53
21-12-2023	₹ 2,333.08	₹ 5,134.37
22-12-2023	₹ 2,933.72	₹ 6,515.49
23-12-2023	₹ 2,685.86	₹ 5,988.34

Grand Total

Astrologers Earnings:- **₹ 99,146.57**

Sum of Netamount:- **₹ 213,987.32**

The performance of agents (astrologers) is crucial to the company's success because their earnings are strongly linked to the company's income.

Using the formula "**=CORREL()**", the correlation between astrologers' earnings and the company's net income is 0.996, which shows a very strong positive relationship.

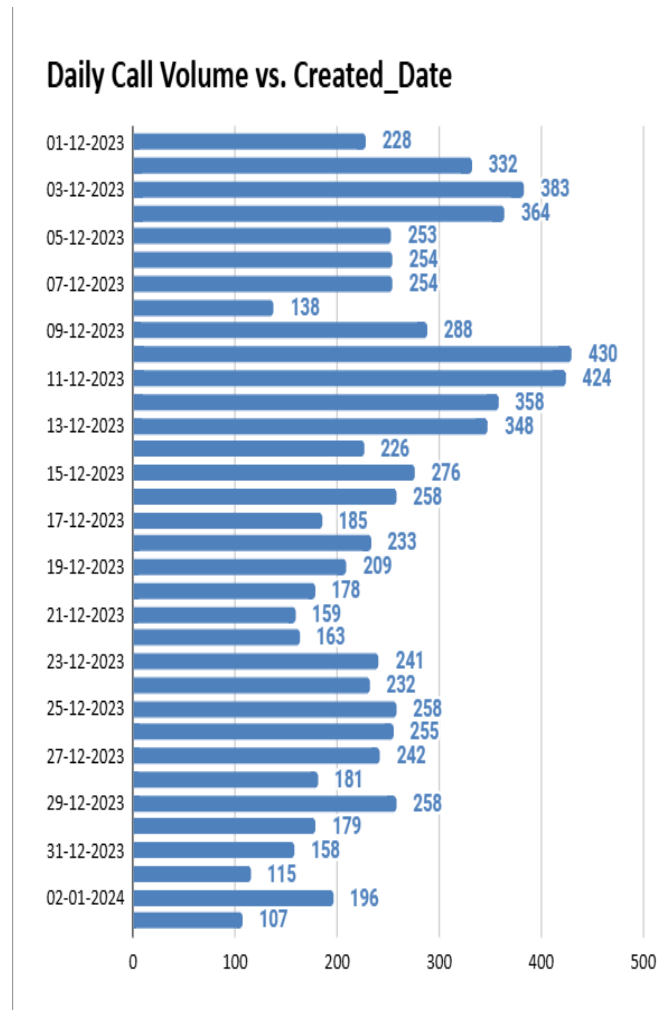
This means:

When agent earnings increase, the company's net income also increases-almost every time and in a

predictable way.

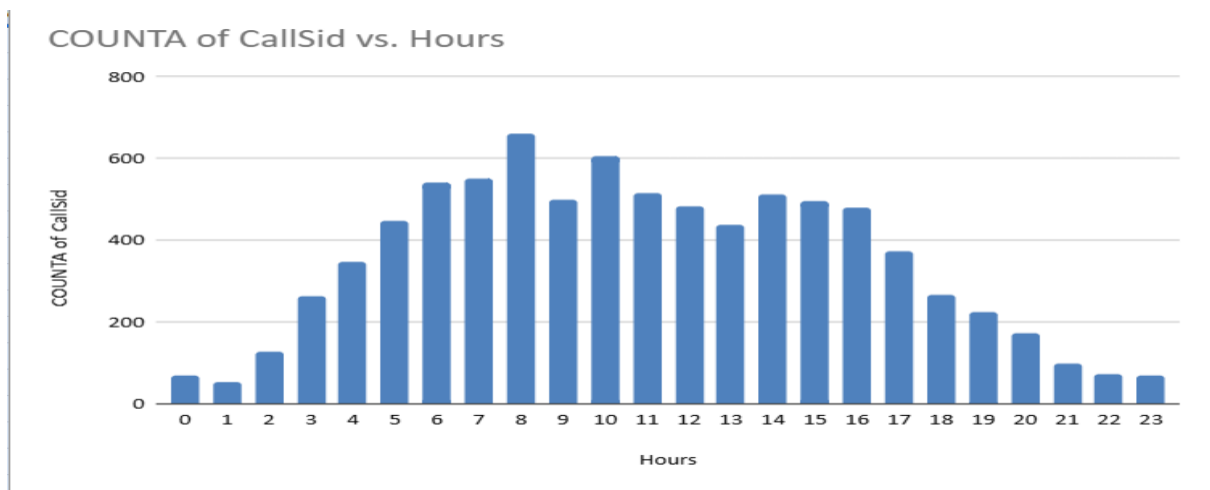
A correlation of 0.99 indicates that both are highly interconnected, and improving agent performance can directly boost company profitability.

4)How can the call center improve its handling of peak call periods to ensure high customer satisfaction? Mention the functionality you will use for giving the suggestions, will it be any aggregated function or a visualization?



On **December 10 and 11, 2023**, the call Center received the **highest number of calls**

Hours	COUNTA of CallSid	
0		68
1		52
2		129
3		264
4		348
5		449
6		541
7		551
8		660
9		498
10		605
11		515
12		483
13		437
14		513
15		497
16		479
17		374
18		265
19		223
20		172
21		99
22		73
23		70
Grand Total		8365



Here we can see the hourly distribution of calls. First, we have to take out hours from creation time with the help of = HOUR FUNCTION, later by taking hours in a row, the count of calls in values, and consultation type in filters and set that filter as call. This is how we can form the pivot table, and later with the help of pivot table we can visualize it with chart.

- **Introduce Live Streaming:**

The company can offer live sessions where astrologers interact with multiple users at once. This will reduce waiting time, keep users engaged, and also help generate more revenue.

- **Optimize Agent Shifts:**

Schedule more agents during peak hours (like evenings or weekends) to handle higher call volumes efficiently.

- **Hire Part-time or Freelance Agents:**

Keep a few on-call or freelance astrologers who can step in during busy times.

This helps manage the load without adding permanent staffing costs.

5) Based on historical data, what strategic initiatives should be prioritized to improve efficiency and customer satisfaction?

STRATEGY 1- Training programs

Only 37.10% of users are satisfied with the service.

Total users = 20753

Satisfied user (Rating-5,6,7,8) = 37.10 %

(formula- =(SUM(satisfied users)*100/total users))

Unsatisfied user (Rating-1,2,3,4) = 62.89 %

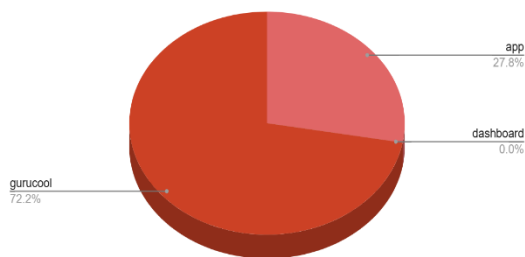
Rating	COUNTA of User
1	2199
2	4323
3	4402
4	2129
5	2165
6	1829
7	1824
8	1882
Grand Total	20753

Agent Training & Quality Improvement

- Strong correlation (0.9969) between agent earnings and company profit shows that agent performance directly impacts business.
- Conduct regular training to boost astrologer skills, which in turn improves user ratings and retention.

STRATEGY 2 – Upgrade Technology.

COUNTA of User



website	COUNTA of Rating
app	7783
dashboard	2
gurucool	20224
Grand Total	28009

website	AVERAGE of Rating
app	3.500706668
dashboard	4.5
gurucool	2.716327136
Grand Total	2.934413938

Upgrade Technology

With 69.8% of users using the **chat service** and an average rating of only **2.72** (for Gurucool), there is a clear **need to enhance the chat platform** for a smoother user experience.

STRATEGY 3 – Optimize Staffing During Peak Hours

callStatus	COUNTA of astrologerOnCallDuration
busy	159
completed	296
failed	105
incomplete	115
no-answer	175
Grand Total	850

- On peak days like 2023-12-10 & 2023-12-11, only 34.82% of users got service.
- Use shift planning, part-time astrologers, or live sessions to better handle high traffic.

This move can make the company stand separate among the rivals. And bring customers and revenue to the company.

6)What can be the key factors contributing to high customer satisfaction scores, and how can these be leveraged to improve overall performance? What is the basis for the suggestions? And mention how you decided if the satisfaction score affects the ratings.

69.66% of total users use the chat service.

<i>consultationType</i>	COUNTA of amount
Call	8491
Chat	19513
Complementary	2
public_live_Call	3
Grand Total	28009

% of user using chat = (Chat user*100)/ Total user

Rating of 6,7,8 is considered as the high satisfaction range.

<i>COUNTA of ChatStatu</i>	<i>consultationType</i>	
<i>Rating</i>	Call	Chat
5	2141	23
6		1829
7		1824
8		1882
Grand Total	2141	5558

Only chat service receives the rating of 6,7,8.

As 69.80% of total users use chat service and 100% of high satisfaction score is given by chat user only, then Chat service can be considered as the key factor contributing to high satisfaction score.

Improvements:

To further enhance user experience, the company can:

- Introduce AI chatbots to handle basic queries and reduce wait times.
- Train employees to adopt new tools, technologies, and workflows that support better service delivery.

These steps will help the company boost overall performance and user satisfaction

7) How should the call center balance the workload among agents to ensure optimal performance and avoid burnout?

Mention your approach and spreadsheet function for the answer.

Total call receive = **8363**

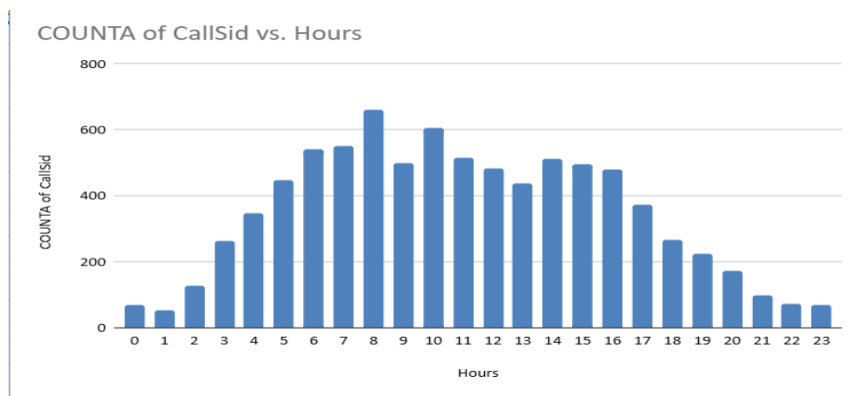
<i>guruName</i>	AVERAGE of call_seconds	
Tarot Srishti	784.7	
Tarot Mamta D	456.1666667	
Astro Aishwarya	416.8333333	Highest average duration
Tarot Swati	391.3076923	784.7
Astro Anju	387.3333333	Tarot Srishti
Tarot Priya S	377	min average duration
Astro Niddhi Guptaa	359	0
Astro Mukesh	343	Tarot Ria
Astro Aditya	313.1509434	Tarot Pooja
Tarot Aritra C	244.1	Tarot Nipamani
Dr. Pratibha	240	Tarot Rupanshi
Acharya Dev	239.6666667	Tarot Ankita
Tarot Gurpreet Kaur	224.7083333	Astro Swami G
Tarot Ittishri	224.1428571	Astro Rohan S
Himanshu Pandey	223.1666667	Astro Pulkit S
Tarot Ari	218.0855263	Astro Nisha
Astro Seema	217.8534031	Astro Ankita C
Astro Anil Shukla	203.1666667	Astro preeti
Astro Sonam S	191.1784038	Astro Manish SM
Astro Divya	190.9926199	Astro Ashok
Dr Balkrisna	188.3721683	Astro Akash
RAKESH KAUSHIK	187.0555556	
Tarot Rhea	184.25	
Tarot Aadhvik	183.6	

Average number of calls per day = 112.07 (Formula : =AVERAGE())

Guru **Tarot Srishti** handles the most calls and has the longest average duration (1800 seconds), while **Guru Astro preeti , Guru Astro Nisha, Guru Astro Pulkit S And Guru Tarot Rupanshi** (so many as mentioned above) has fewer calls and much shorter durations. This shows an imbalance in workload. Some gurus are overloaded, while others are underutilized.”

<i>CallsStatus</i>	COUNTA of User
busy	1270
completed	3450
failed	1168
incomplete	875
no-answer	1728
Grand Total	8491

% of calls gets complete = 40.63 % {Formula= (Completed calls * 100)/ total calls}Call centre receives approx. 250 calls per day, but only 40.63% of calls are completed in total from the astrologer's side.



Suggestions-

- 1) To balance the workload company can analyze the historical data. The hourly distribution of calls can help the company to balance workload accordingly among agents
- 2) Introduce live streaming to handle multiple users at once and increase engagement.
- 3) Optimize agent shifts by scheduling more agents during peak hours.
- 4) Use part-time or freelance astrologers to manage high workloads cost-effectively.
- 5) Implement AI chatbots to handle basic queries and reduce agent load.
- 6) Analyze hourly call trends to distribute workload more evenly among agents.

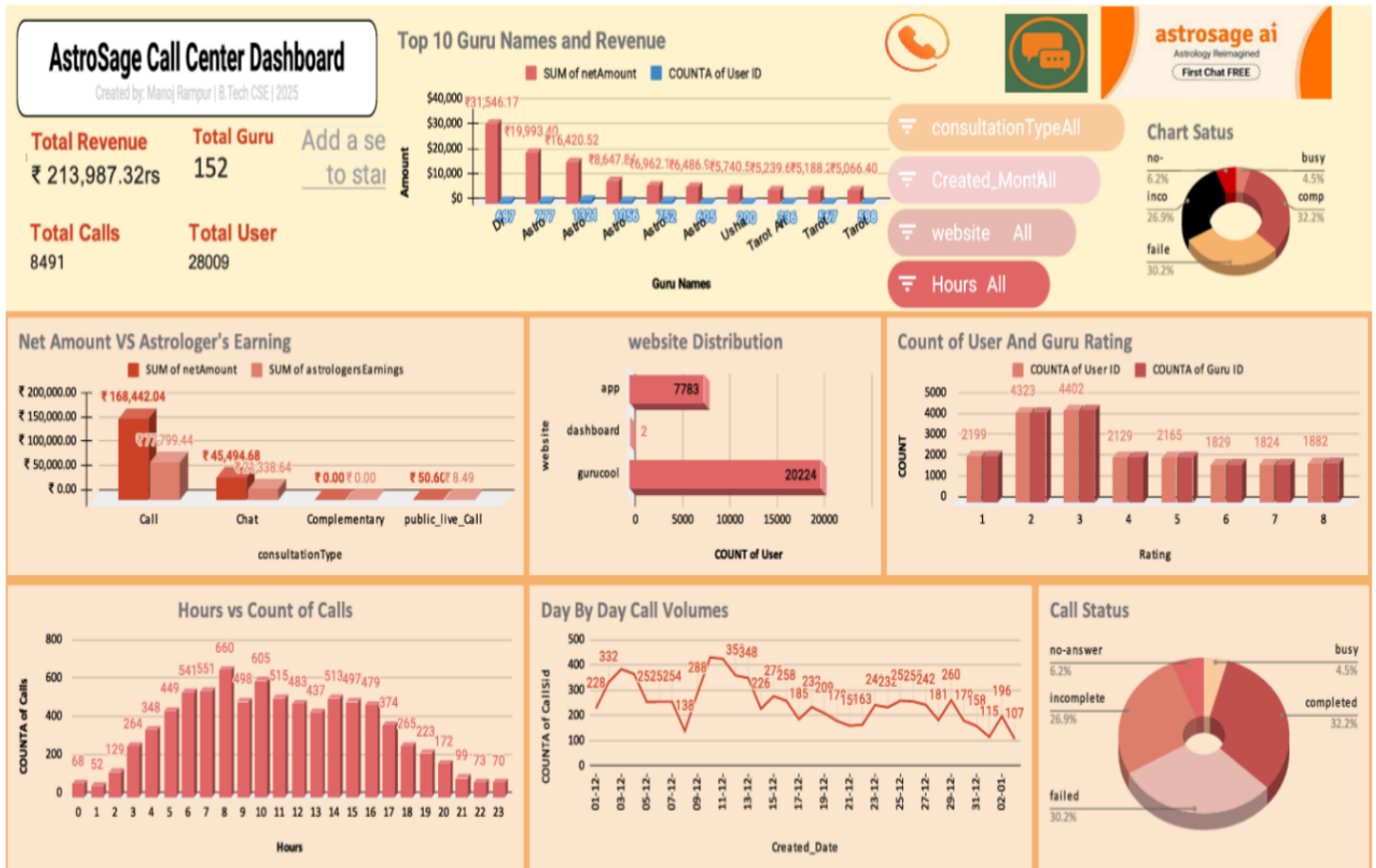
8)What new technologies or tools could be implemented to enhance call center operations and customer service?

AstroSage already uses Exotel, but can enhance operations by integrating **AI chatbots** to handle basic chat queries and reduce agent load. Implementing **real-time dashboards** using Power BI or Excel can help monitor KPIs effectively. Additionally, integrating **CRM tools** and using features like **callback scheduling** and **sentiment analysis** can improve personalization and service quality.

- **Live Streaming Sessions**
Allow astrologers to interact with multiple users at once, especially during peak times.
- **Call Routing Systems**
Automatically direct users to the best available astrologer, reducing wait and call drop rates.
- **Automated Feedback Collection Tools**
Collect post-session ratings and suggestions without manual effort.

9) What metrics should be included in the final dashboard to comprehensively view call center performance and guide investment decisions?

DASHBOARD



Metrics that are included in Dashboard-

1) KPI (Key performance indicator) –

- Total Users: 28009 – Represents the total number of users.
- Total Amount: 213,825.9 – Sum of total revenue
- Total Calls: 8363 – Total count of calls made.
- Total Guru: 152
- Avg Rating: 3.2

2) Number of Calls by Date

- Shows daily call volume trend – useful to detect peak/low activity days.

3) Net Amount vs Astrologer's Earnings

- Compares how much astrologers earned vs what the company made (net).

4) Count of User and Guru Rating

- Shows how satisfied users were based on rating distribution.

5) Call Distribution by Website

- Identifies which platform is generating most of the calls.

6) Chat Status by Users

- Shows the distribution of chat statuses (completed, failed, etc.)

7) Call Status by Users

- Shows the distribution of chat statuses (completed, failed, etc.)

8) Top 10 Gurus

Shows the distribution of Guru Revenue and rating

8) Slicers Used

These are dropdown filters added for interactivity:

- Consultation Type
- Created_date
- Chat status

These allow users to dynamically explore the data for specific periods, channels, or service types.

10) How would you allocate a 1 crore rupee investment to optimize operational efficiency, enhance customer satisfaction, and boost profitability, and what analysis-based recommendations would you offer to support this?

1. Technology Upgrade – ₹40 lakhs (40%)

- 69.80% of users use chat services, mainly on Gurucool, which has a low average rating of 2.72.
- Recommendation:

Upgrade the chat platform (UI/UX).

Introduce AI chatbots for instant query resolution.

Improve backend performance to reduce lag or crashes.

- Expected Outcome: Improved chat satisfaction, better retention, and reduced operational delays.

2. Agent Training Program – ₹25 lakhs (25%)

- Only 40.63% of booked calls are completed. Calls are the main revenue driver, contributing 78.69% of the company's income.
- Recommendation:
 - Conduct monthly training on soft skills, upselling, and technical handling.
 - Use analytics to identify underperforming agents and offer targeted coaching.
- Expected Outcome: Increase in successful calls, better customer experience, and improved satisfaction.

3. Support Infrastructure, Data Security & Customer Care Tools – ₹35 Lakhs (35%)

- Hire freelance/part-time agents to manage peak hours and reduce customer wait time.
- Invest in infrastructure and data protection (cloud backups, system stability).
- Set up automated feedback tools (post-call surveys, follow-ups) to improve customer support and satisfaction.

THANK YOU