OBJECTIVE QUESTION SOLUTION

**1.What is the total no. of tables present in the data?**

**(ANSWER)-**one is original data set and other more than 10 table used as pivot table in analyzing it

2. **What is the total no. of attributes present in the data?**

**(ANSWER)-** The dataset you've provided contains 35 attributes (columns) in total. These attributes represent different aspects of a user’s interaction, consultation details, timestamps, call statuses, and financial metrics.

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

**(ANSWER)-**

1. In chat status column some cell is blank due to call option choosen in consultation I replaced blank cell with “call”
2. similiarly in call status column blank cell filled with “chat”
3. .In AstologeronCallDuration column empty cell filled with 0 , similiarly Astrologer earnings and net amount column having empty cell filled with 0
4. Other flaged column are created as per required like –date , time , day etc

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

**REFERENCE -sheet1/chart 1**

**APPROACH**

* Call volume calculated by count of “call” consultation type based on weekdays .
* Change in call volume calculated by substracting the present count with previous count.

**INSIGHTS**

**1. Peak Days (Monday-Wednesday):**

* Since call volume increases steadily from Monday to Wednesday, consider adjusting staffing levels to ensure adequate coverage.
* Implement dynamic scheduling to allocate more agents during peak hours.

**2. Drop on Thursday (-400):**

* A sharp decline suggests a potential issue—investigate whether this is due to external factors (e.g., holidays, system outages) or internal inefficiencies.
* If this drop is consistent, consider redistributing workload or offering incentives to encourage customer engagement on Thursdays.

**3. Friday Recovery (-100):**

* While Friday shows some recovery, it’s still below the earlier peak. You might explore marketing strategies or service optimizations to boost engagement.
* If this trend is seasonal, forecasting models can help predict future fluctuations.

**4. Sunday Neutral (0):**

* If Sunday is consistently neutral, it may indicate low customer activity. You could explore whether offering self-service options or automated responses would be beneficial.

**ANSWER- part(2)-**

**\*average of daily call volume=**250.2353

**REFFERENCE-** SHEET 1/CELL NO.-G62

**APPROACH-**

first total day calculated and total count of call calculated in these day and then dividing total call volume to the total no. days gives average call volume

**5. Which months experienced the highest and lowest call volumes?**

**ANSWER-**

****

**REFERENCE-SHEET1/PIVOT TABLE- A56**

**APPROACH –**

1-In data sheet first create new column of month and extract month from already present column “createdAT”

2. after creating new month column ,a pivot table created and putting month in row , count of call in value and apply filter on consultant type,and then exclude the chat consultant type from filter for getting count of different type of call in each month

**OBSERATION-**

**1. December is the month having highest call volumes=**418

**2. Janurary is the month having highest call volumes=**8095

**6. What is the total operational cost for that month?**

**REFERENCE -SHEET1/PIVOT TABLE AT A56**

**ANSWER-**

|  |  |
| --- | --- |
| Month | Operational cost |
| January | 5360.408 |
| December | 93786.16295 |
| **Grand Total** | **99146.57095** |

**APROACH –**

* 1. Allready create pivot table at a56 in sheet 1 add sum of AstrologerEarning in values Option of pivot table and then in filter portion select all type of consultation Which gives nothing but total operational cost for each month

**OBSERVATION**

1. January month having very low operational cost as compare to the December month , this is due to the less no of date available in January month

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

ANSWER-

**REFERENCE**-SHEET 1/CELL NO. D60 TO G64



**APPROACH-**

1. From pivot table(at f3) count the total no day using count() function of excel
2. Now count the unique agent (AstrologerName) from data sheet using count()

And unique() function and dividing it to the total no. of day(g60).

1. Now count total call consultation type from data sheet and then divide it to

The total no. of days which is in g60 cell to get average call volume per day

1. Now dividing the average call volum per day(g62) to the average agent

Working per day(g61) to get average call per agent per day (g64)

**OBSERVATION**

1. **Count of Days**: The dataset spans **34 days**
2. **Average Agents Working Per Day**: **4.38 agents** on average, indicating a relatively small team handling daily operations.
3. **Average Call Volume Per Day**: **250.24 calls**, suggesting a moderate level of customer interactions.
4. **Average Calls Per Agent Per Day**: **57.10 calls per agent**, which is a significant workload per individual.

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

**ANSWER-**

**REFERENCE- SHEET 1/PIVOT TABLE AT I60 AND CHART NO.12 **

**APPROACH**

* 1. **Creating a new column name as type of user distinguishing as Repeaters or**

**Unique using IF and COUNTIF function using UId (H) column**

* 1. **Creating a pivot table at i60 putting type of users in rows and count of it in values and show it term of percentage.**
  2. **Also creating chart 12 (pie chart) to visualize the percentage of type of users .**

**OBSERVATION**

* 1. **Your data shows that 77.88% of users are repeaters, while 22.12% are unique users. This indicates strong user retention but a relatively low influx of new users.**

**9.What is the total sales generated by the call centre for each product category?**

ANSWER-

**REFERENCE**- SHEET 1/PIVOT TABLE AT A43



**APPROACH**

* 1. Creating pivot table in sheet 1 with consultant type in row and sum of net amount in values to get the total sales generated by each product category

**OBSERVATIONS**

1. Table shows that total sales by “call” consultant type much greater than

Others so there need to improvement in other part

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

ANSWER-

**REFERENCE**- SHEET 1/PIVOT TABLE AT T5 AND W3

**APPROACH-**

1. Creating two pivot table for userId and guruID and putting the count of call

In values and apply filter on consultant type to exclude “chat” type

**OBSERVATION-**

1. pivot table at u3 shows that there is some users which have call count >

100 which shows the great interest of user towards the app

1. pivot table at x3 shows that some user likes to interact with specific guru.
2. Maximum call generated for guruID 256 having total call count is 1060

Which shows most liked guru

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

ANSWER-

**REFERENCE** – SHEET 1/ M114 to N114

|  |  |
| --- | --- |
| correlation between  call duration and customer satisfaction score | 0.529773706 |

**APPROACH** –

1. First we apply filter in date sheet to filter out the “chat” consultant type
2. Now apply CORREL FUNCTION to find out the relation between call duration and customer satisfaction

**OBSERVATION**

1. **There is a wide variability in duration across different ratings, with no clear trend and correlation value is only 0.5 which show less relation between them**
2. **Summary: Ratings and durations do not show a strong relationship, indicating that improving one may not directly affect the other.**

12. **Which guru have the highest and lowest customer satisfaction scores?**

ANSWER-

|  |  |  |  |
| --- | --- | --- | --- |
| Guru name | Max rating |  |  |
|  |  |  |  |
| Astro Pujaa Rai | 7.5 |  |  |
|  |  |  |  |
|  |  |  |  |
| Guru name | Min rating |  |  |
| Tarot Rittika | 0 |  |  |

**REFERENCE**- SHEET 1/PIVOT TABLE AT AA3 and CELL AC2 TO AE8

**APPROACH**

1. Creating pivot table at AA3 in sheet 1 ,GuruName in row and average of rating in values gives average rating of each Guru.
2. With the help of pivot table maximum rating is found using MAX() function

And using XLOOKUP function to find out the guru name who get this rating.

1. Similiarly using pivot table , minimum rating is found using MIN() function

And using XLOOKUP function we found guru name who get this rating.

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

ANSWER-

**REFERENCE** – SHEET 1 / PIVOT TABLE AT Q43 also chart23



**APPROACH-**

* + 1. Creating pivot table with month in rows and average of rating in values the average customer satisfaction score per month

**OBSERVATION-**

1. WE can see clearly that nothing as much difference in average rating in different month .
2. Only insight is taken that both month get very low average ratting which indicate that lot of improvement required in call centre

14) **How many categorical columns are there in the data?**

ANSWER-Out of these 35 columns(orignaly), the **categorical columns** are typically those with data type object or bool, as they represent qualitative data such as statuses, names, or boolean flags . These are: \_id, user, chatStatus, guru, guruName, consultationType, website, refundStatus, updatedAt, statementEntryId, chatStartTime, chatEndTime, callChannel, callIvrType, callStatus, CallSid, astrologerCallStatus, region, userCallStatus, isWhiteListUser, queue, freeCall, and freeChat.

**Categorical attributes:**

* Object type columns (19): These include fields like user, chatStatus, guruName, consultationType, etc.
* Boolean type columns (4): These include isWhiteListUser, queue, freeCall, and freeChat.

# SUBJECTIVE QUESTION SOLUTION

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

**ANSWER**

**REFERENCE- SHEET 1/PIVOT TABLE at AD73**

**VISUALISATION-**

**APPROACH-**

1. **Creating a pivot table with guruID in rows and average rating in values**
2. **Creating a chart to visualize the performance of each guru.**
3. **This help us to understand that how much customer satisfy with which guru.**

**OBSERVATION-**

* **Wide Rating Variability: The overall fluctuations in ratings indicate that performance (or satisfaction levels) isn’t uniform. The ratings range markedly—from near 0 for some Guru IDs (e.g., around Guru ID 85) up to nearly 7 for others (notably around Guru ID 97). This spread suggests that while some Gurus are excelling, others are either underperforming or perhaps facing issues needing attention.**
* **Peaks and Troughs: The graph’s pronounced peaks and troughs imply that certain Gurus maintain consistently high ratings while others exhibit poor performance or inconsistent ratings. The sharp drops followed by quick recoveries could signify isolated events—possibly linked to one-off factors such as a unique incident, a temporary issue with evaluation methods, or even fluctuations in sample size. It raises the question: are these dips driven by a systemic issue, or are they anomalies?**
* **Potential Outliers and Data Distribution: With Guru IDs like 97 rating very high and Guru IDs like 85 rating extremely low, these could be considered outliers. It’s important to assess whether these data points reflect true performance differences or if there are external factors (such as feedback volume, evaluation criteria, or even seasonal variations) affecting the ratings.**

**RECOMMENDATION –**

* **From this analysis we can see that customer satisfaction is not uniform and it also show the bad experience for customer using this app,so there require more trained agent to give better experience to the customer**

**ANSWER (part 2)**

**REFERENCE- SHEET 1/ IVOT TABLE at Z3 and chart no. 54**

**VISSUALIZATION-**

**APPROACH-**

* 1. **Creating a pivot table with guru name in rows and corresponding on call duration as values**
  2. **Creating a combo chart to visualize the parameters.**
  3. **This help us to understand the efficiency of each guru , and what improvement require like training , new technology etc.**

**OBSERVATIONS-**

1. **Dual Metrics at Play: The graph contrasts two important performance metrics for each guru:**
   * Average Call Duration (red line, left axis): Measured in seconds, this indicates the time each guru spends on calls.
   * Average Rating (blue line, right axis): Represents customer satisfaction. This dual-axis setup helps uncover whether longer call durations translate to better customer outcomes or if they hint at inefficiencies in call management.
2. **Performance Variability Across Gurus:** 
   * The data appear to show that some gurus balance their call durations with high customer ratings, while others do not. For instance, gurus like Astro R.J.S and Tarot Sunita seem to achieve high ratings with moderate call durations, likely reflecting efficient and effective customer interactions. Conversely, a guru such as Astro Aditya (or others with similarly extended call durations) shows high call durations without a corresponding boost in ratings. This discrepancy might signal that prolonged calls are not necessarily generating added value, or it might highlight issues in how calls are managed.
3. **Potential Outliers & Inconsistencies:** 
   * Variations in the metrics across different gurus suggest differing approaches or challenges. Some gurus might be spending extra time to accommodate complex queries, while others may be handling calls too quickly without adequately addressing customer needs. The presence of these inconsistencies indicates potential areas where standardized practices and further training might be beneficial.

**RECOMMENDATION –**

* 1. **Benchmark Best Practices:** Identify gurus like Astro R.J.S and Tarot Sunita who maintain high ratings with efficient call durations. Analyze their techniques, communication approaches, and problem-resolution methods.
  2. Organize knowledge-sharing sessions or mentoring programs where these high performers can share strategies with peers to uplift overall performance.
  3. Offer coaching or training focused on streamlining conversations, ensuring that calls are both comprehensive and efficient. Techniques such as structured probing, clear call scripts, or time-management practices can be introduced.

**ANSWER(part 3)**

**REFERENCE- SHEET 1/PIVOT TABLE at Q19 and chart 25**

**VISUALISATION-**

**APPROACH-**

* + 1. Creating a pivot table with call and chat status in rows and following count in values and consultant type in filter to filter the consultant type accordingly.
    2. Creting pie chat o better show the status.
    3. It help us to understand that where call center improve its performance and implementing new technology

**OBSERVATIONS-**

* + 1. In both pie chart large part shows failure of call centre.
    2. In call status 41% call comleted and other are failed due to less agent , failure of system.
    3. In chat status also only 37% of chat is completed and other are not complted or ends with pending which shows less competency of call centre system

**RECOMMENDATION**

**1. Move to Cloud-Based Solutions**

* Adopt Cloud Telephony: Cloud-based call center platforms offer scalability, flexibility, and cost efficiency.
* Enable Remote Work: Cloud solutions allow agents to work from anywhere, improving workforce flexibility.
* Ensure Seamless Integrations: Choose platforms that integrate with CRM, analytics, and workforce management tools.

**2. Implement AI and Automation**

* AI-Powered Chatbots & Virtual Assistants: Automate routine inquiries to free up human agents for complex issues.
* Intelligent Call Routing: Use AI-driven algorithms to direct calls to the most suitable agent based on expertise and availability.
* Speech Analytics & Sentiment Detection: Monitor customer interactions in real time to assess satisfaction and improve service quality.

**3. Enhance Omnichannel Communication**

* Integrate Multiple Channels: Ensure seamless interactions across voice, email, chat, social media, and SMS.
* Unified Customer View: Provide agents with a single dashboard displaying customer history across all touchpoints.
* Consistent Experience: Maintain uniform service quality across all communication channels.

**4. Upgrade Workforce Management Tools**

* AI-Driven Scheduling: Optimize staffing based on call volume predictions to reduce wait times and agent burnout.
* Performance Analytics: Track agent productivity and provide real-time coaching based on data insights.
* Gamification & Training: Use AI-driven learning modules and gamification to enhance agent engagement and skill development.

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

**REFERENCE-SHEET 1 chart 50**

**APPROACH-**

* 1. Creating a scattering plot between call duration and rating from data sheet to show comparison between them.

**OBSERVATIONS-**

* There is a wide variability in duration across different ratings, with no clear trend or correlation visible.
* Some ratings have a high spread in duration, suggesting inconsistent experiences for these cases.
* Summary: Ratings and durations do not show a strong relationship, indicating that improving one may not directly affect the other.

**1. Hiring**

* **Risks:**
  + High turnover rates due to job dissatisfaction or stress.
  + Recruitment costs can escalate without guarantees of long-term retention.
  + Mismatches between candidate skills and role requirements.
* **Mitigation:**
  + Implement robust hiring processes with clear role expectations and cultural fit assessments.
  + Offer competitive benefits and a supportive work environment to improve retention.
  + Use analytics tools to evaluate candidate suitability during recruitment.

**2. Training**

* **Risks:**
  + High costs if training programs are not effectively designed or fail to yield improvements.
  + Disruption to operations while staff attends training sessions.
  + Difficulty in adapting training content for diverse skill levels.
* **Mitigation:**
  + Focus on tailored, role-specific training modules using e-learning or microlearning to save time.
  + Schedule training during off-peak hours to minimize impact on operations.
  + Continuously evaluate and update training content based on employee feedback and performance metrics.

**3. Technology Upgrades**

* **Risks:**
  + High upfront costs for new systems or tools.
  + Resistance from employees struggling to adapt to new technology.
  + Downtime during the implementation or risk of technical failures.
* **Mitigation:**
  + Conduct a cost-benefit analysis before investing in technology.
  + Provide adequate training and support during implementation.
  + Partner with reputable vendors and have contingency plans for potential technical issues.

**3.How does AstroSage call center performance compare to that of AstroGuru in terms of average call volume, customer satisfaction, and agent performance?**

**ANSWER-**

**1. Average Call Volume**

* AstroSage: Known for its strong online presence and free services, AstroSage likely handles a high call volume, especially for paid consultations.
* AstroGuru: Positioned as a premium service with celebrity astrologers, AstroGuru may have a lower call volume but potentially higher-value calls.

*Likely Comparison*: AstroSage might have a higher call volume due to broader accessibility, while AstroGuru could focus on quality over quantity.

**2. Customer Satisfaction**

* AstroSage: Mixed reviews—some users appreciate free services, while others report inconsistencies in paid consultations.
* AstroGuru: Generally perceived as more premium, with higher satisfaction rates due to verified astrologers and structured consultations.

*Likely Comparison*: AstroGuru may lead in customer satisfaction due to stricter quality control, whereas AstroSage’s satisfaction may vary based on free vs. paid services.

**3. Agent (Astrologer) Performance**

* AstroSage: Agents may vary widely in experience, with some being less experienced but more affordable.
* AstroGuru: Tends to onboard well-known astrologers, ensuring better-trained agents but at a higher cost.

**Conclusion**

* Higher call volume: Likely AstroSage (broader reach).
* Better customer satisfaction: Likely AstroGuru (premium positioning).
* **Agent** performance: AstroGuru likely has stricter quality standards.

**4. How can the call center improve its handling of peak call periods to ensure high customer satisfaction?**

ANSWER-

**REFERENCE-**SHEET 1/PIVOT TABLE at AD42 and chart 10

**VISUALISATION-**

**APPROACH-**

* + 1. Creating new column in data sheet to extrat only hours range using formula “=CHOOSE(QUOTIENT(HOUR(U2),3)+1,” from “createdAT” column .
    2. Now creating a pivot table in sheet 1 with each hour range in row and “call”type consultant in value and consultant type in filter to filter out “chat”.
    3. Now creating column chart to visualize the peak hour in which most of call are mde
    4. We create some slicer like “date” , “day” , “month” to see the variation.

5. Above chart shows the overall performance.

**INSIGHTS-**

1. **Peak Call Hours**:
   * The highest call volumes occur between **08:00 and 18:00**, with a noticeable peak around midday (e.g., 10:00 to 12:00).
   * The lowest call volumes are during late-night and early-morning hours (00:00 to 06:00).
2. **Call Distribution**:
   * Calls start rising sharply around **07:00**, peak during business hours, and decline after **18:00**.
   * There is a slight dip in the early afternoon (e.g., 13:00 to 14:00), possibly due to lunch breaks.
3. **Total Volume**:
   * The total call volume is significant during working hours, suggesting high demand for services during these times.

**Recommendations:**

1. **Staffing Optimization**:
   * **Increase staff during peak hours (08:00-18:00)** to handle the high call volume and reduce wait times.
   * **Reduce staff during off-peak hours (00:00-06:00)** to save resources, as call volumes are minimal.
2. **Self-Service Options**:
   * Implement **automated systems or chatbots** for common queries during peak hours to reduce the load on human agents.
   * Encourage customers to use **online portals or FAQs** for non-urgent issues.
3. **Lunch Break Coverage**:
   * Ensure adequate coverage during the early afternoon (13:00-14:00) to address the slight dip in calls, which might rebound afterward.
4. **After-Hours Support**:
   * For critical services, consider **limited but available support** during late hours (e.g., 18:00-22:00) to cater to customers who may call outside standard business hours.
5. **Data Segmentation**:
   * If the data includes different consultation types, analyze each type separately to identify specific patterns (e.g., emergency calls might peak at different times than general inquiries).
6. **Customer Communication**:
   * Inform customers of **peak hours** and suggest alternative times for non-urgent calls to balance the load.

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

ANSWER-

**REFERENCE-** SHEET 1 /PIVOT TABLE at A63 and chart 51

**VISUALISATION-**

**OBSERVATIONS-**

1. **Only 41% of calls are fully completed** – A significant portion (65%) either fails, goes unanswered, or remains incomplete.
2. **High No-Answer Rate (20%)** – Agents may be understaffed or inefficient in call handling.
3. **Failed & Incomplete Calls (24%)** – Indicates technical issues (e.g., call drops) or agent skill gaps.
4. **Pending Calls (51%)** – Suggests slow resolution times or backlog.

**RECOMMENDATION -**

**1. Operational Efficiency**

* **Optimize Staffing**: BY Seeing call volumes available for per agent per agent , scheduling agents effectively, especially during peak times would be effective
* **Skill-Based Routing**: Direct customers to the most qualified agents to resolve issues faster, enhancing both efficiency and satisfaction.

**2. Technology Integration**

* **Upgrade Systems**: Adopt advanced CRM platforms to centralize customer data and enable seamless service across channels.
* **AI-Powered Tools**: Implement chatbots, virtual assistants, and automated workflows to handle repetitive tasks and free up agents for complex queries.
* **Omnichannel Support**: Ensure consistent customer experience across phone, email, chat, and social media platforms.

**3. Reduce No-Answer & Pending Calls**

* **Optimize Staffing:** Use historical data to align agent shifts with peak call volumes.
* **Auto-Callback Feature:** For missed calls, offer an automated callback option.
* **Skill-Based Routing:** Direct calls to the most qualified agents to reduce transfers.

**4. Minimize Failed & Incomplete Calls**

* **Improve Call Stability:** Check for network/IVR issues causing drops.
* **Agent Training:** Focus on handling objections, quick troubleshooting, and smoother call transitions.
* **Script Optimization:** Simplify scripts to reduce call duration without sacrificing quality.

1. **Action Plan**
2. **Short-Term (1-2 Weeks)**
   * Implement auto-callbacks for no-answer calls.
   * Start agent refresher training on call handling.
3. **Mid-Term (1 Month)**
   * Introduce dynamic staffing based on call volume trends.
   * Fix technical issues causing call drops.
4. **Long-Term (3+ Months)**
   * AI-powered call routing to reduce inefficiencies.
   * Gamification to boost agent performance.

**6.What can be the key factors contributing to high customer satisfaction scores, and how can these be leveraged to improve overall performance?**

**ANSWER-**

1. **Key Observations:**
   * **Failed chats have the highest count (~7000), but their max rating is only 1, indicating dissatisfaction and a critical failure point.**
   * **Completed chats have a relatively high count (~5000) and a moderate max rating of 5, showing that while completions are happening, there is room for improvement.**
   * **Other statuses (e.g., pending, started) show negligible counts, suggesting minimal impact but an opportunity for refinement.**
2. **Implication: The high failure rate reflects inefficiencies in chat processes, which could damage customer satisfaction and trust.**

**CALL Service:**

1. **Key Observations:**
   * **Completed calls have the highest count (~3500) and a consistent max rating of 5, highlighting successful resolution and satisfaction.**
   * **No-answer calls have a significant count (~2000) but a max rating of 5, implying unresolved customer queries.**
   * **Failed and incomplete calls also contribute to inefficiencies in operations.**
2. **Implication: The call service performs reasonably well in completing interactions but needs improvement in handling unanswered and failed calls.**

**Recommendations:**

**To address these issues and improve overall efficiency and customer satisfaction:**

**CHAT Service:**

1. **Reduce Failures:**
   * **Conduct root-cause analysis to understand why chats fail (e.g., technical glitches or agent unavailability).**
   * **Invest in chatbot AI to handle simple queries effectively and reduce pressure on human agents.**
   * **Train agents to manage conversations more efficiently.**
2. **Enhance Completion Rates:**
   * **Monitor completed chats to identify patterns leading to success and replicate those strategies.**
   * **Simplify chat workflows to make processes faster and more user-friendly.**

**CALL Service:**

1. **Address Unanswered Calls:**
   * **Introduce call-back options to minimize customer wait times during high-demand periods.**
   * **Use predictive analytics to align agent availability with peak call times.**
2. **Improve Failed and Incomplete Calls:**
   * **Provide regular training for agents on resolving complex queries more effectively.**
   * **Streamline call routing mechanisms to connect customers with the most suitable agents.**

**Cross-Service Initiatives:**

1. **Focus on Technology:**
   * **Upgrade communication tools to handle higher volumes with fewer disruptions.**
   * **Implement real-time monitoring dashboards for both chat and call services.**
2. **Customer Feedback Integration:**
   * **Actively seek feedback from customers after interactions to pinpoint areas for improvement.**
   * **Use these insights to refine processes and enhance service delivery.**

**Conclusion:**

**Prioritize reducing failure rates in CHAT services and unanswered calls in CALL services while leveraging technology and employee training to optimize performance. By addressing these pain points strategically, you can significantly boost operational efficiency and customer satisfaction.**

**7.How should the call centre balance the workload among agents to ensure optimal performance and avoid burnout?**

**ANSWER-**

**REFERENCE – SHEET 1 pivot table at A63 and chart 9**

**APPROACH-**

* 1. **Creating a pivot table with astrologer name in rows and call volume and respective average rating in values .**
  2. **This help us to analyze how each guru is efficient and which guru is overburdened and which is less**
  3. **Creating a combo chart to visualize each factor.**

**OBSERVATION –**

1. **High Call Volume Gurus**
   * **Some names (e.g., *Astro Anaya, Astro Dr..., Tarot Rhea*) likely receive more calls, indicating popularity.**
   * **Others (e.g., *Astro Tidha, Astro Dhya*) may have lower call volumes.**
2. **Performance Metrics**
   * **High call volume + high rating → Efficient and well-liked (e.g., *Dr. Harish, Tarot Sridhi*).**
   * **Low call volume + low rating → Potential need for training or re-evaluation.**
   * **Long call durations → Could indicate thorough consultations or inefficiency.**
3. **Potential Bottlenecks**
   * **If top-performing Gurus are overloaded, wait times may increase.**
   * **Low-rated Gurus may be causing customer dissatisfaction.**

**Recommendations to Improve Efficiency**

**1. Optimize Guru Allocation**

* **Peak Hours: Assign high-rated, fast Gurus (*e.g., Tarot Rhea, Dr. Harish*) during peak call times.**
* **Balanced Workload: Distribute calls evenly to prevent burnout of top performers.**
* **Underutilized Gurus: Provide additional training or marketing to boost their visibility.**

**2. Improve Call Handling Efficiency**

* **Set Time Limits: If some Gurus take too long per call, implement soft time targets.**
* **Automate Simple Queries: Use AI chatbots for basic astrology questions (e.g., horoscope readings) to reduce call load.**

**3. Enhance Guru Performance**

* **Training for Low-Rated Gurus: Offer coaching on communication, accuracy, and speed.**
* **Incentivize High Performers: Reward Gurus with high ratings and efficient call handling.**

**4. Customer Feedback & Retention**

* **Follow-Up Surveys: Ask customers to rate consultations to refine accuracy metrics.**
* **Promote Top Gurus: Highlight highly-rated Gurus in marketing to attract more callers.**

**5. Data-Driven Scheduling**

* **Predictive Analysis: Use historical data to forecast busy periods and schedule accordingly.**
* **Dynamic Routing: Automatically route calls to available, high-rated Gurus first.**

**Action Plan**

1. **Identify Top & Bottom Performers → Reward or retrain accordingly.**
2. **Balance Call Distribution → Prevent overloading popular Gurus.**
3. **Implement Time Management → Reduce unnecessarily long calls.**
4. **Introduce Automation → Handle simple queries via chatbots.**
5. **Monitor & Adjust → Track changes in ratings and call volumes post-optimization.**

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

**ANSWER-**

**1. AI-Powered Chatbots and Virtual Assistants**

* Automate responses to common queries, reducing agent workload.
* Provide 24/7 support and seamless handoffs to human agents for complex issues.

**2. Omnichannel Communication Platforms**

* Integrate multiple communication channels (voice, email, chat, social media) into a single interface.
* Ensure consistent customer experiences across all touchpoints.

**3. Speech Analytics and Sentiment Analysis**

* Analyze customer calls in real-time to detect emotions and sentiment.
* Provide agents with actionable insights to improve interactions.

**4. Cloud-Based Contact Center Solutions**

* Enable remote work for agents with secure, scalable, and cost-effective infrastructure.
* Offer flexibility and easy integration with other tools.

**5. Workforce Management Software**

* Optimize agent scheduling based on call volume predictions.
* Monitor performance and provide real-time feedback.

**6. Customer Relationship Management (CRM) Integration**

* Centralize customer data for personalized interactions.
* Improve issue resolution times by providing agents with complete customer histories.

**7. Interactive Voice Response (IVR) Systems**

* Allow customers to self-serve for simple tasks like account inquiries or payments.
* Route calls efficiently to the right agents.

**8. Real-Time Collaboration Tools**

* Facilitate instant communication between agents and supervisors for quick problem-solving.
* Enhance teamwork and knowledge sharing.

**9. Predictive Dialers and Call Routing**

* Automate outbound calls and prioritize high-value leads.
* Use intelligent routing to connect customers with the most suitable agents.

**10. Advanced Analytics and Reporting Tools**

* Track key performance indicators (KPIs) and customer satisfaction metrics.
* Use data-driven insights to refine strategies and improve service quality.

These technologies not only streamline operations but also elevate the overall customer experience.

9. **What metrics should be included in the final dashboard to provide a comprehensive view of call centre performance and guide investment decisions?**

**ANSWER-**

**To craft a truly effective call center performance dashboard that supports investment decisions, you'll need a mix of operational, customer-centric, and employee-related metrics. Here’s a breakdown of key metrics to include:**

**Operational Metrics**

1. **Call Volume: Total number of incoming and outgoing calls.**
2. **Average Handling Time (AHT): Time agents spend on calls, including wrap-up tasks.**
3. **First Call Resolution (FCR): Percentage of calls resolved without follow-up.**
4. **Abandoned Call Rate: Percentage of calls where customers hang up before being helped.**
5. **Call Queue Times: How long customers wait before being connected to an agent.**

**Customer Experience Metrics**

1. **Customer Satisfaction Score (CSAT): Customers’ rating of their overall satisfaction.**
2. **Net Promoter Score (NPS): How likely customers are to recommend your service.**
3. **Customer Retention Rate: Percentage of customers returning after their initial interaction.**

**Employee-Centric Metrics**

1. **Agent Utilization Rate: Percentage of time agents spend actively assisting customers.**
2. **Agent Turnover Rate: Frequency of employee churn within the call center.**
3. **Employee Satisfaction: Feedback from agents about their work environment and support.**

**Financial Metrics**

1. **Cost per Call: Total costs divided by the number of calls handled.**
2. **Revenue Generated: For sales-driven call centers, track the income directly generated from calls.**

**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?**

**ANSWER-**

**1. Technology Enhancements**

**Invest in cutting-edge technology to streamline operations and deliver better customer experiences:**

* **Upgrade CRM Systems : Implement or improve customer relationship management software for efficient tracking of customer queries and resolutions.**
* **AI and Automation: Introduce AI-powered tools like chatbots for handling simple queries, and predictive analytics for forecasting call volumes.**
* **Real-Time Monitoring Tools : Enhance real-time call tracking and reporting systems to identify bottlenecks faster.**

***Reference*: After Analyzing historical call data to we identified areas where automation can reduce handling time and optimize resource allocation and improve overall performance**

**2. Workforce Development**

**Focus on training and retention to improve agent performance and satisfaction:**

* **Skill Development Programs: Offer advanced training in customer handling, empathy, and product knowledge.**
* **Employee Wellness Initiatives : Introduce programs aimed at reducing burnout (e.g., flexible schedules, counseling support).**

**3. Customer-Centric Initiatives**

**Enhance customer satisfaction through targeted strategies:**

* **Feedback Mechanisms : Establish robust systems (e.g., post-call surveys, sentiment analysis tools) to capture customer feedback.**
* **Loyalty Programs : Create rewards for long-term customers to build stronger relationships.**

**4. Operational Improvements**

**Optimize workflows and resource allocation:**

* **Peak Call Management: Invest in predictive tools for managing high-call periods effectively.**
* **Process Optimization : Streamline workflows using lean methodologies to eliminate inefficiencies.**

**5. Contingency Fund**

**Reserve funds for unforeseen expenses or opportunities:**

* **Emergent Technologies: Adapt to market trends by being ready to invest in innovative tools when necessary.**

**Analysis-Based Recommendations**

1. **Data-Driven Decision-Making: Leverage predictive analytics to assess ROI on investments.**
2. **Cost-Benefit Analysis: Quantify impacts (e.g., reduced call times, improved CSAT scores) to ensure investments align with long-term goals.**
3. **KPI Monitoring: Regularly measure metrics like AVERAGE HANDLING TIME, CUSTOMER SATISFACTION SCORE, and employee satisfaction to track progress and adjust strategies.**

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