**#DataDNA May Brief: Technical Support Analysis Challenge**

**Introduction:**

In today’s world, businesses of all sizes rely heavily on technology for daily operations. Technical support plays a crucial role in maintaining these systems efficiently. This month's challenge provides a real-life scenario for you to explore: analyzing the functioning of technical support. It’s a great chance to learn from fellow participants, improve your analytical abilities, and broaden your professional experience.

**Data Analysis Focus Areas:**

You have the freedom to choose your analytical approach. However, consider the following questions to guide your exploration, centered around Technical Support Centre Key Performance Indicators (KPIs):

**Ticket Volume Trends:**

* Analyze daily, weekly and monthly volumes (Slicer for date, created column)
* Compare volumes between workdays and weekends (Created column, DAX for DATE)
* Examine ticket distribution during standard work hours versus after hours.
* Recognize peak ticket creation times. (Created column, line chart for Date)

**Ticket Content and Resolution:**

* Identify trends in ticket topics. (Topic Column, total volume of created column)
* Investigate first response and resolution times against SLAs.
* Compare support channels (chat, phone, email) (Source Column, created column)
* Analyze ticket geography for trends in submissions or product issues. (Map)

**Performance Metrics:**

* Evaluate agent SLA adherence for first responses and resolutions.
* Explore customer satisfaction rates across agents, topics and other categories
* Check how quickly tickets move through the resolution process.

Questions to answer:  
1. What are the peak ticket creation times?  
2. How does the first response and resolution times compare against SLAs? (Survey result column, first response and resolution column )  
3. Explore customer satisfaction rates across agents, topics and other categories. (Survey result column, topic column, source)

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| **Term** | **Description** |
| Status | Ticket Status in Support Pipeline.  (Open: a new ticket awaiting processing,  In Progress: Currently being addressed by an agent,  Resolved: Solution has been provided.  Closed: Customer has confirmed the ticket's closure.) |
| Ticket ID | Unique Ticket Number |
| Source | Channel of Request (chat, phone, email) |
| Priority | Ticket Urgency (low, medium, high) |
| Support Level | Ticket Difficulty Level (Tier 1, Tier2) |
| Product group | Product group to which the request pertains |
| Topic | Subject matter of the customer's inquiry. |
| Agent Group | Agent group to whom the agent belongs (1st level support, 2nd level support) |
| Agent Name | Agent currently handling the ticket |
| Created time | Timestamp indicating when the ticket was received. |
| Expected SLA to first response | Deadline for providing the initial response |
| First response time | Timestamp of the initial response. (1% empty) |
| SLA For first response | First Response Compliance (Within SLA, SLA Violated) |
| Expected SLA to resolve | Deadline for resolving the ticket. |
| Resolution time | Timestamp of ticket resolution. (19% empty) |
| SLA For Resolution | Resolution Compliance (Within SLA, SLA Violated) |
| Close time | Timestamp of ticket closure. (53% empty) |
| Agent interactions | Total count of agent interactions for each ticket. (1% empty) |
| Survey results | Customer Satisfaction Rating: Feedback score on a scale of 1 to 5. (53% empty) |
| Country | Country of origin for the customer creating the ticket. |
| Latitude | Country Coordinates: Latitude |
| Longitude | Country Coordinates: Longitude |
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