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Helpdesk Dashboard Summary

Helpdesk - Dashboard

1. Helpdesk Summary

- Showcasing institution names, incidents, total incidents resolved, calls offered, handled calls based on each institution. This is just a quick summary of details about each institution

2. Based on the total number of incidents, below are the top three institutions that have the most incidents:

- Empire State University - 9998 total incidents - 30.97 %
- Gotham University - 5500 total incidents - 17.04%
- Blue Mountain State - 5000 total incidents - 15.49%

Based on the data in the pie chart, Empire State University, Gotham University, and Blue Mountain State have the most incidents versus Monsters University and Springfield University. This gives us insights that the number of incidents of an institution may be related to the number of students attending, staff, faculty, being understaffed, institution size & capacity, and etc.

3. SLA Violations Per Month

- This displays the number of violations per month for the “Average Handle Time (SLA)” and “Average Speed of Answer (SLA)” performances
- This helps us to see if the client is meeting the SLAs agreed upon between the institution and servicer.
 - i. We can showcase these by days, months, and years if wanted
 - ii. September is the month that has the highest number of SLA violations for handled time and speed of answer
 - 1. This makes sense because September is the month that students come back to school and the number decreases as months go by
 - 2. December, January, and February have the lowest number of SLA violations, the decrease in SLA violations may be due to less due to the months because of interims and less students attending during interims
- If I were to select a specific institution from the pie chart, it will show the number of SLA violations for handle time and speed of answer based on that specific institution

- As I clicked through each institution name in the pie chart, initially I noticed that University of Quahog had the highest number of incidents accounting for 30.97% of the total number of incidents and accounting for a decent amount of the SLA violations for handle time and speed of answer. But as I clicked on Monsters University, which accounts for 10.84% of the total number of incidents, almost two-thirds less than University of Quahog, showed that Monsters University institution had the highest number of SLA violations in handle time and speed of answer out of every institution in this data set

Helpdesk - Incidents & Performance

1. The card visualizations are displaying the actual average handle time and average answer time compared to the SLAs client agreed upon on with the servicer at each institution
2. By selecting a specific institution on the pie chart, it will showcase the following:
 - a. Incidents resolved
 - b. Incidents Unresolved
 - c. Incidents Trashed
 - d. Why most incidents are requested (reason why the incidents are placed)
 - i. I.e technical, support, BbSS Enabling Technology, Admissions, etc.
 - e. What sources users have trouble most with (reason why they're filling out an incident)
 - i. I.e. Login/access, LMS Support General, College Portal, etc.

Summary:

One example of how the interactive charts and graphs work in the Help Desk - Incidents Performance Dashboard:

- If I select Empire State University from the pie chart, it will show me that:
 - 5.5k incidents were resolved, 577 unresolved, and 44 trashed
 - 4.8k of these incidents are requesting primarily for Technical Support, the rest of the 0.7k incidents are unknown
 - The unknown are blank cells in the dataset. Again this is an issue with the dataset as to why are these cells blank or have missing information
 - If we look closer at the source of these requests, most of the sources are because of "Unknown" and "Login/Access"
 - The unknown are blank cells in the dataset. Again this is an issue with the dataset as to why are these cells blank or have missing information

IMPORTANT NOTE:

As I go through each institution, they all have blank data/missing information categorized as "Unknown". Based on the dataset, there were several blank cells. I wanted to fill the blank cells with the label, "unknown", so that any user who is reading this dashboard will know what the data is instead of the data showing up labeled as a blank label on each graph or chart. To a user viewing this data, this will initiate the investigation of what these "unknown" results may mean and why they are blank.

Helpdesk - Insights

- Click on any institution in the bar graph and it will display:
 - Average number of handled calls by each month vs the actual number of handled calls by each month
 - Average offered calls vs actual offered calls by each month
 - Actual average answer time (in seconds) by each month

Summary:

- **The data is skewed and not accurate due to several rows of data having blank cells. It could be that these blank cells were meant to be empty, but we can't assume.**
- **My thought process:**
 1. *Where is the data was sourced from*
 2. *Go to the team/individual that gave the data sets, how did they get it and from where*
 3. *Go to the software developer team that created the LMS system to see if there are any bugs to the LMS, why the data is not populating as it should*
 4. *Figure out what the blanks mean and what teams to talk to for further information/clarifications*
 - i. *Whether the cells were meant to be empty, or if there's an actual value missing, or if the information isn't populating correctly into the database*

What I did in this data set:

1. Changed data types in certain columns

- a. i.e. for Customer ID in “Helpdesk Customers” table, it was originally a “whole Number” and I changed it to “Text” because if I were to use this column of data to count the number of customers, it would not add the numbers if it were still a “whole number” data type versus a “text” data type, where it will just count the number of rows of the Customer ID column

2. Replaced Values - Blank Cells to “Unknown”

- a. For all blank cells, not null values, I replaced it with “Unknown” because if I use any data that has blank cells, Power BI will count it and display it “Blank” or leave the name blank on any data visualization (graphs, charts, etc.). I didn’t want to confuse a user who would be looking at the dashboard and wonder what the blank data was for and what it meant.

3. Showcasing seconds into a hh:mm:ss format

- a. Created a new column to average the total seconds
- b. Created a new column referencing to the “average total seconds” column and created a format of how the data should be split into hh:mm:ss format

4. For each date, it included the time (00:00:00) and date (mm/dd/yyyy) in one whole column. I splitted it and generated new columns from the date.

- a. Split by delimiter to separate time and date into its own column
- b. Generated new columns from date to display month name, day name, and year into its own separate columns
 - i. For example, if I wanted to show the number of “Handled Calls” per month, I wouldn’t be able to do that if I didn’t generate the month data from that date column.
 - ii. This is extremely helpful if you want granularity of your data (i.e. number of handled calls per day, month, or year)

5. Showcasing SLA Violations

- a. Compare the “Total Answer Time” column to the “Average Answer Time SLA” value to see if “Total Answer Time” has violated the “Average Answer Time SLA”
- b. This is extremely beneficial if you want to see how well your help desk performance is doing such as:
 - i. If helpdesk is meeting the SLAs agreed upon on

- ii. If helpdesk isn't meeting the SLAs, what are opportunities that helpdesk can work on and improve on
 - iii. If helpdesk has none or lower SLAs, what are they doing to help this situation
- c. I created a conditional column called "Answer Time SLA Violation" saying that if "Total Answer Time" > "Average Answer Time SLA" then return yes, if else, null
 - i. Again this is why separating dates into months, days, years is beneficial. I can combine the both "Month" column with the "Answer Time SLA Violation" and see how many answer time sla violations occurred in a specific month, day, or year