**Zentel Network Service Center Performance Report**

This report is based on sample data from Zentel Network Service center.  
Customers log their different types of complaints via different channels and expect quick responses and resolutions to their queries.

These customers have a Service level agreement with the Network service provider to respond and resolve their daily queries within a particular duration.

This service center has different Managers and operators looking into the customers' issues and performance can be measured weekly and daily.

Here's a link to the description of the different variables in the dataset <https://github.com/PauloDaguvnor/DataFest-Datathon-Materials/blob/main/Datathon%20Casestudy.pdf>

The Data assessment was done using python (see accompanying [python notebook](https://github.com/NneomaN/Datafest_Dathon/blob/main/ASSESSING%20AND%20CLEANING%20THE%20ZENTEL%20NETWORK%20SERVICE%20TICKET%20DATASET%20by%20the%20DATA%20ARCHIVES%20.ipynb)) and further analysis and visualization done in Power BI (see accompanying Power BI Desktop file or [Report Link](https://app.powerbi.com/view?r=eyJrIjoiZGU4YzFjNGUtNTA1Mi00YTVkLWJlZGYtYmI4ZTc3MWYzNGQ0IiwidCI6IjcwODU3MjViLWYwMWQtNGQwMi1hZDFjLWIxYThhNmY0NDEwNiIsImMiOjh9&embedImagePlaceholder=true)).

**Observations**

PERFORMANCE OVERVIEW

* Complaints come in via 6 communication channels and are handled by 28 operators. There are 5998 complaints sampled in this dataset.
* At the time of analysis,569 complaints, which make up 9.5% of the complaints were still active
* Most complaints made were due to the faults from the Customer’s End.
* On average, the response duration is 22secs which is more than twice the Service Level Agreement of 10 secs; while the resolution duration is about 2.5 hours which is also above SLA but still within the fair range.

TURN AROUND TIME ANALYSIS

* Between the hours of 6pm to 9m, both average response and resolution durations are above the defined thresholds. This confirms the top executive’s view that the time TAT during this period should be optimized.
* However, the TAT for response time needs to be optimized across board as most response durations fall above the stipulated threshold when viewed across the hours of the day
* On average Resolution times exceed the SLA between the hours of 4pm and 6am.

DELAY ANALYSIS

The report was filtered to analyse only records where the response duration was beyond the 10 seconds defined in the SLA

* There is no significant difference across the different reporting channels, Geopolitical Zone an Operators when reports are not responded to as quickly as defined in the SLA
* Traffic Spikes complaints are responded to a lot slower than most other fault types, while Power loss Issues are responded to more quickly

EMPLOYEES’ PERFORMANCE

* On average across board, all managers have poor response times from their operators. However, when viewed filtered by various channels and hours of the day, variances emerge. For example, the team managed by Wale responds more quickly to Webforms, with Kola being the swiftest operator, Although Bukky ad Sofia, both members of Wale’s team have response times tice the stipulated SLA. Seun’s team, on the other hand all respond rather slowly to complaints from the Webforms.

RECOMMENDATIONS

* + Hire more Operators/technicians to resolve issues during the night shift to ensure resolution times during 4pm to 6am hours stay within the SLA
  + The general strategy to responding to complaints needs to be reviewed as the average overall response duration is well beyond the stipulated SLA
  + Operators be assigned to specific channels to ensure better focus and save time switching from one complaint channel to the other.