Tele performance

BUSINESS CASE

1. Problem
2. Diagnosis
3. Results
4. Recomendation

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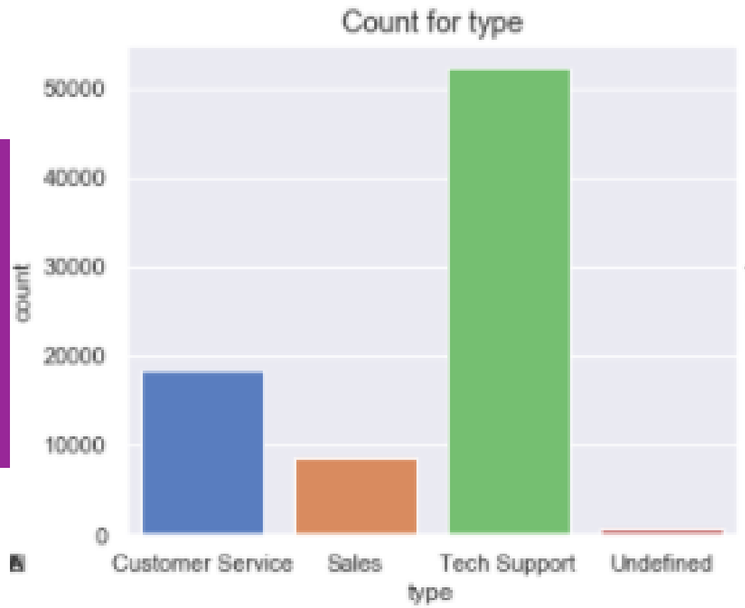
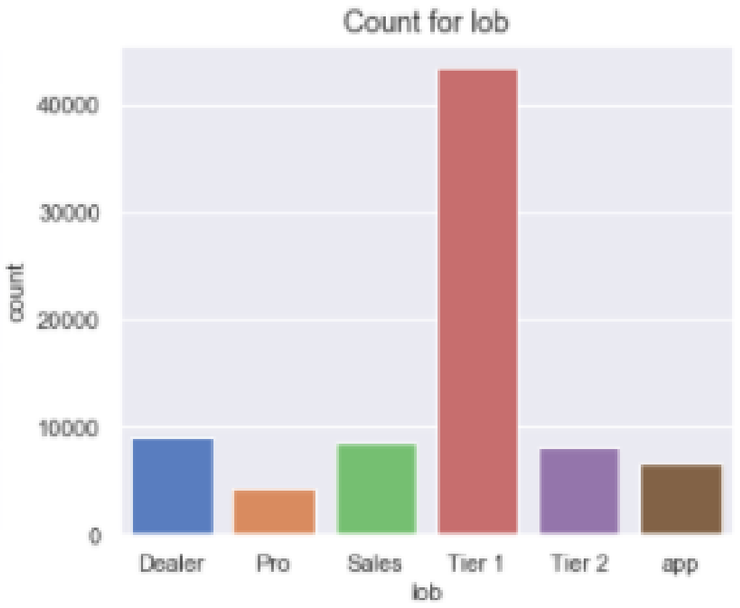
METRICS & BUSINESS

01 METRICS OF SLA

Answer rate - 92% - #AnsweredCalls/ OfferedCalls•
CSAT - 85% - #Surveys8to10/#Surveys•
DSAT - 8% - #Surveys1to3/#Surveys•
SLA email - 85% - #AnsweredLess24H/ #Answered





One of the conclusions that we can abstract is that this dataset is from a TELECOMMUNICATIONS CALL CENTER, according to its departments, Tiers and logins.

Key points :Technical support represents the majority of sales, followed by consumer services and sales.Tier 1 has a great demand for basic problems.Next, we have a "parity" between TIER 2, DEALER, SALES. Indicating that the company allocates equally, the priorities of negotiation, sales and resolution of complex problems.

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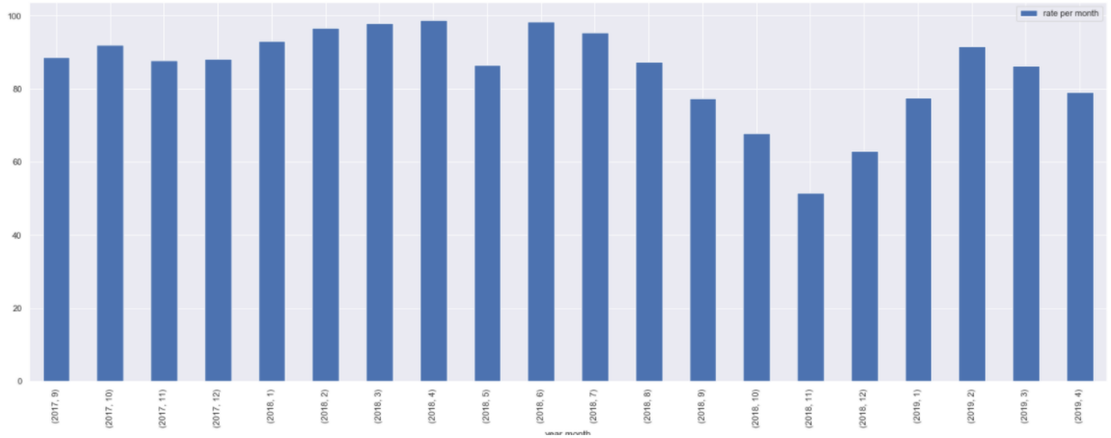
Problems
The SLA for for Answer rate is Going Down!!!

	year	month	answered calls	offered calls	rate per month	rate evaluation
0	2017	9	536	605	88.595041	value lower than expected target
1	2017	10	3732	4053	92.079941	inside the target
2	2017	11	4751	5415	87.737765	value lower than expected target
3	2017	12	7383	8362	88.292275	value lower than expected target
4	2018	1	7206	7742	93.076724	better then expected target
5	2018	2	4889	5055	96.716123	better then expected target
6	2018	3	5010	5117	97.908931	better then expected target
7	2018	4	4460	4515	98.781838	better then expected target
8	2018	5	4036	4666	86.498071	value lower than expected target
9	2018	6	4646	4718	98.473930	better then expected target
10	2018	7	7685	8036	95.383275	better then expected target
11	2018	8	11222	12836	87.425989	value lower than expected target
12	2018	9	11289	14576	77.449232	value lower than expected target
13	2018	10	11830	17449	67.797582	value lower than expected target
14	2018	11	13593	26369	51.549168	value lower than expected target
15	2018	12	14352	22828	62.870159	value lower than expected target
16	2019	1	17542	22629	77.519996	value lower than expected target
17	2019	2	14749	16118	91.506390	value lower than expected target
18	2019	3	13759	15944	86.295785	value lower than expected target
19	2019	4	9416	11897	79.146003	value lower than expected target

Monthly since 9-17 -> 04/2019



Year (2017-2019)

Since 2017, until the month of 10, we had good and even better values than the established metrics. However, something happens in 10 ~ 2018 that drastically affects the Answer However, compared to 2018, the team at this call center has better results.

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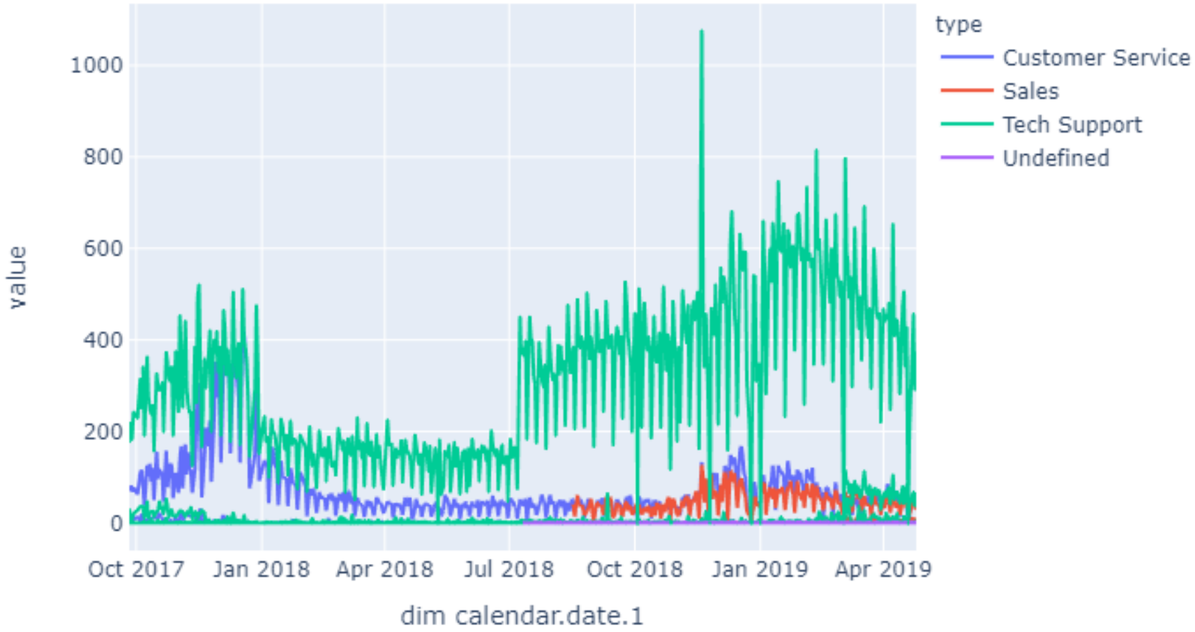
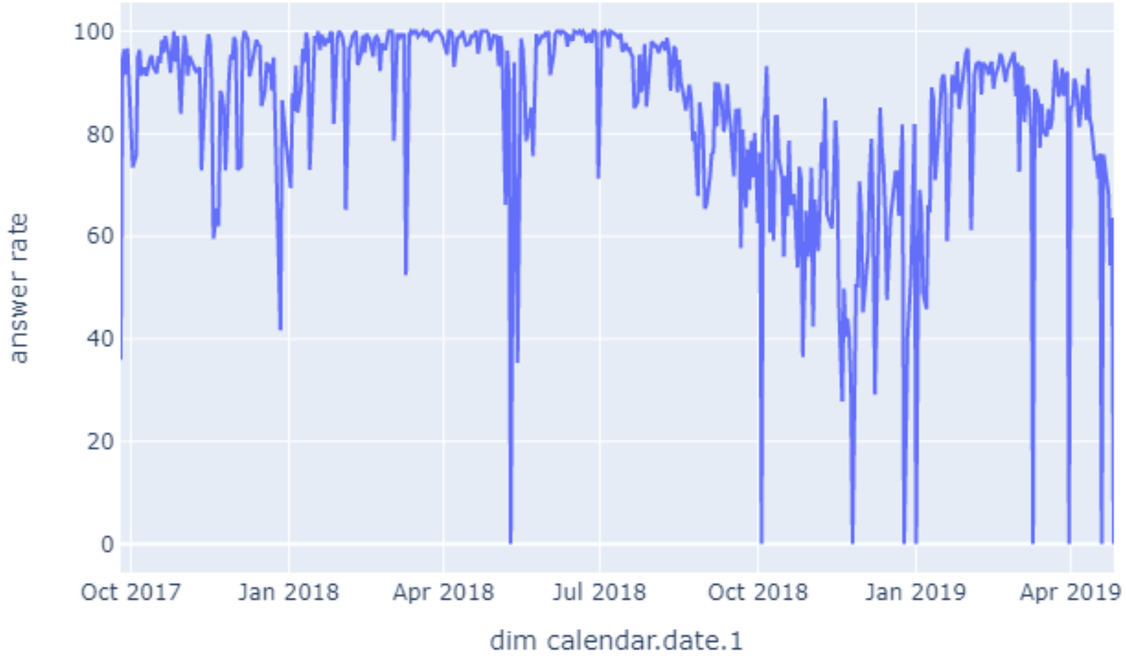
Instability





The absence of a better structured standard at the SLA level of response time, leads many customers to dissatisfaction. Mainly in the most important category of the Call center = Tech support

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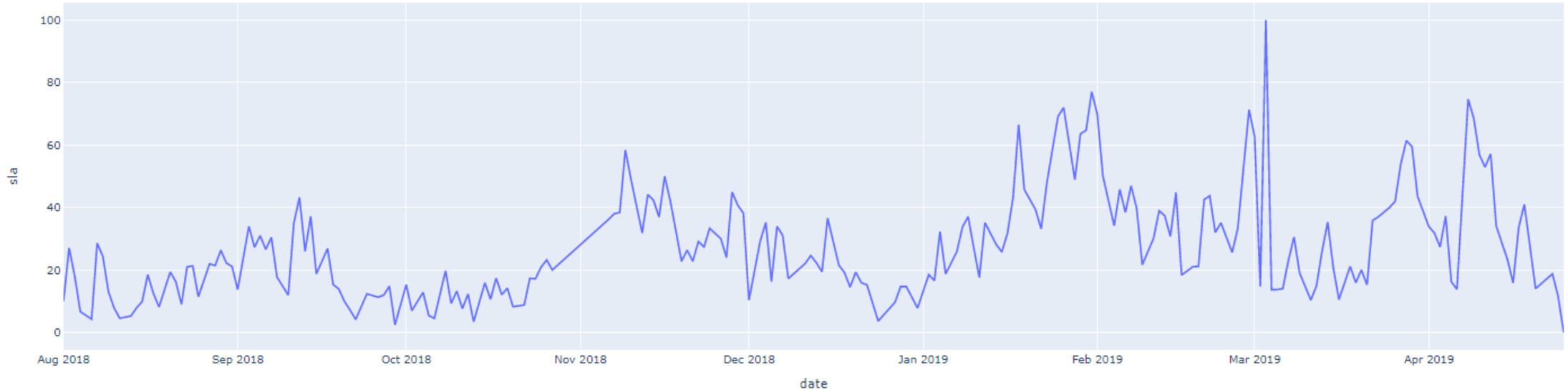
E-mail Metrics



Assuming that the SLA deadline for answering this team's email is 24hrs. We currently have an average of approximately 28% of the 25 established being calculated by the TOTAL TICKETS / Total Tickets (e-mails) answered in 24 hours.

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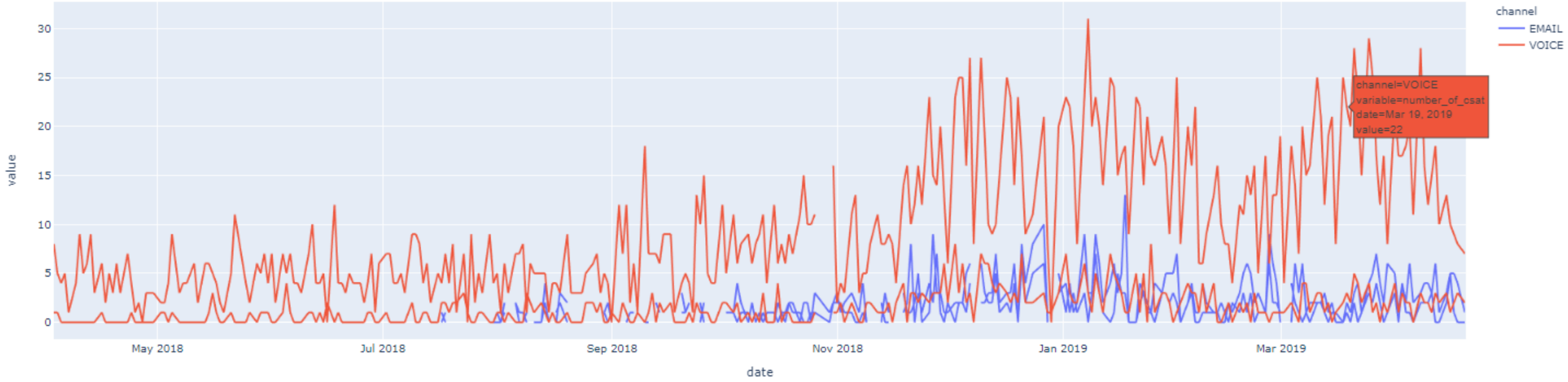
CSAT - DSAT



These metrics need to be REVIEWED BY THE BUSINESS TEAM, or it is necessary to investigate more precisely why the metrics deliver a rate of 8 to 10 as Target, if the maximum value found for Number_of_CSAT in the DataSet is 4.0.

In addition to the inconsistencies, it is possible to perceive a behavioral seasonality in the voice channel regarding CSAT. However, it is possible to perceive a further drop in CSAT from the 18th of March until the end of the data. The DSAT, also inconsistent with the metric, behaves similarly to the email and voice channels, not behaving in a "really" way inverse to the CSAT.

Both data have unbalanced distributions.

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INSIGHTS

RECOMMENDATIONS

SLA E-MAIL

Invest as much as possible in using NLP for automatic identification and e-mail response to the TIER 1 e-mail channel. (AUTOMATION)

Set aside a budget to train the team in terms of time management, process automation (INVESTMENT AND AWARENESS OF EMPLOYEES)

Answer Rate

Standardize the service script.

Create incentives to decrease the Handle Time / Wait Time

Invest in training the technology team and hire more staff.

Check with the board, which were the decisions made since 10 2018 that resulted in a decrease in the service rate.

Provide software capable of previously identifying the possible customer issue.?

CSAT & DSAT

Review the metrics, check their methods of insertion by the customer.

At this point, creating a reward for those who responded to surveys would result in a large amount of data to be analyzed, since at this moment.

Deal with the person in charge of the database regarding cleaning, maintenance and dataset aspects.

Carefully analyze the CSAT / DSAT in different categories and with data that match the metrics.

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LINKS & COMMENTS

https://github.com/jgoncsilva/TP-Case

https://app.powerbi.com/groups/me/reports/09e000be-98f9-4498-a0a8-5a559e4f2cdc?ctid=8fe90e57-4ee4-4139-b545-a1d685d64efd

Points to improve (Python)

Treat outliers differently with more knowledge of the business.

Continue with a more detailed descriptive and exploratory analysis, creating a Mind Map of Hypotheses that with a little more time and knowledge of the variables and columns could be done.

Perform Feature engineering, and adjust a predictive model to forecast business performance, by forecasting the number of tickets or calls, so that the team and the number of personnel can be organized.

Improve my MODELING skills.

Choose Power BI for ETL when needed.

Add a page with more important KPIS like AHT, Abseenteism.

Provide a forecast connecting Python or R or native Power bi tools to forecast important business data

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4. 1 Hard Times

Missing data
Excess of acronysms
Absence of knowledge from the specific business team of the project.

I hope we can work together soon!

It was a great learning experience