



CallMeMaybe Operator Performance

Analysis performed by
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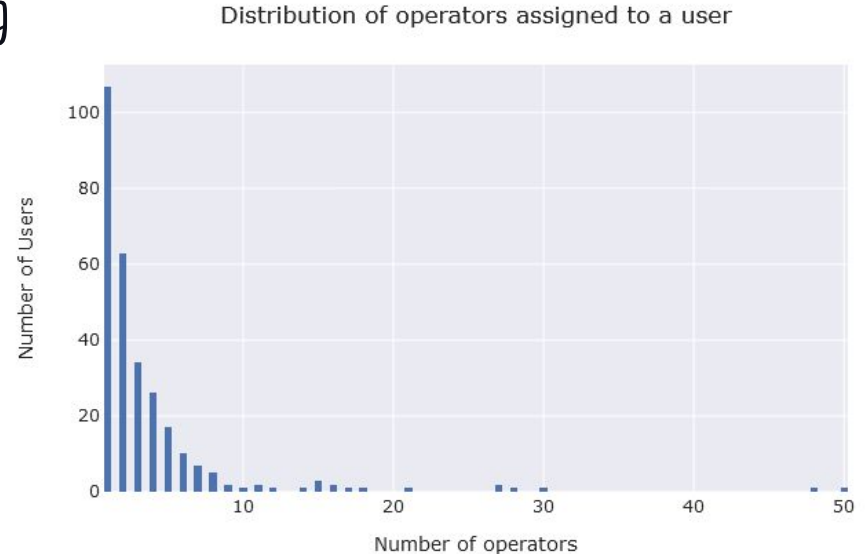
Link to dashboard: https://public.tableau.com/profile/alina7324#!/vizhome/CallMeMaybe_16106288661390/CallMeMaybedashboard

Summary:

- **Task:** Determine the thresholds for effective operator performance according to KPIs
- **Methodology:** KMeans clustering algorithm
- Now, let's drill down :)

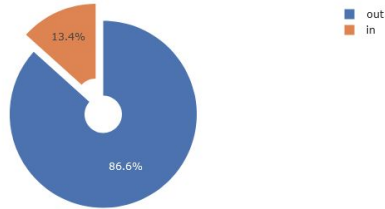
Work distribution:

- Each operator is assigned to one user.
- Most users are assigned, one operator.
- 19 significant users are given more than 9 operators.

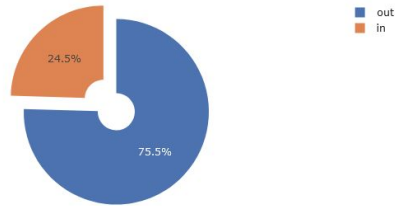


Call proportion by direction:

Proportion of call direction after eliminating missing operators



Proportion of call direction of the entire data (including missing operators)



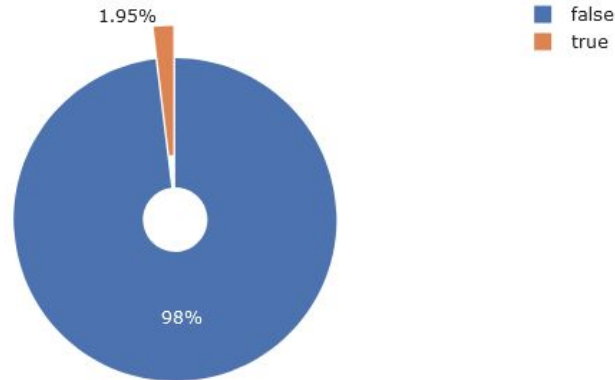
- 15% of the data was not related to any operator.
- Those were mostly incoming external unanswered calls
- The pies show the difference in proportions of call direction, with and without missing operators.
- Clearly, most of the work is on outgoing calls.

Call proportion on internal and external calls:

Almost all the calls are external calls.

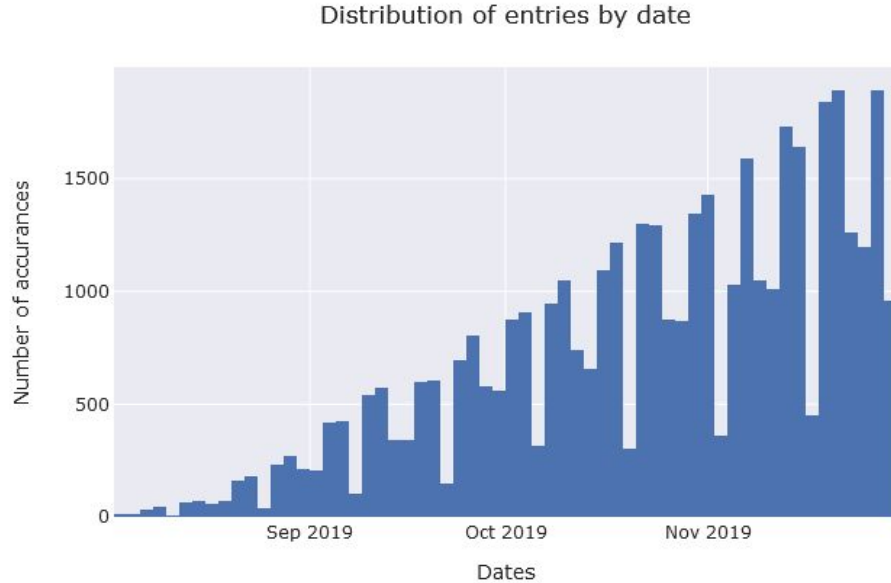
Internal calls are only 2% of the clean data.

Distribution of internal and external calls



Entries over time:

- The data covers 4 months (Aug-Nov).
- We can detect each week.
- There is a gradual rise in work during these months.



The users join between 01/08-31/10/2019 (parallelly to the collection of the data). This could explain the rise in workload.

Weird operator behaviour:

- 7 operators logged unrealistic hours (up to call duration of 46 hours a day).
- A typical shift at a call center is 8-12 hours long.
- I set the bar at 12 hours (43,200sec) and eliminated the outliers.
- These unrealistic hours could be due to several operators using the same login to the company systems.

Results of clustering:

	<u>Incoming</u>		<u>Outgoing</u>	
	Call Abandonment Rate	FRT- First response rate	Calls per agent	Answer success rate (ASR)
Effective	Not relevant	> 25 Seconds	> 34 Calls per day	> 25 Calls per day
Ineffective	Not relevant	< 25 Seconds	< 34 Calls per day	< 25 Calls per day

Call Abandonment Rate

- Most of the relevant calls were never assigned to an operator and excluded from the data.
- For the missed calls that were analyzed, there was no statistically significant difference between effective and ineffective operators.
- This indicates that the metric is not suitable to evaluate the performance of a single operator but should be used to evaluate the call center as a whole.

Waiting time (FRT- First response rate)

- The average waiting time for effective operators is 13 sec and for ineffective operators is 37 sec.
- Studies show that callers wait 20-30 seconds for a response and usually abandon the call after a minute.
- The numbers indicate that the operators' performance in this metric is good.

Number of outgoing calls (calls per agent)

- The average number of calls a day made by an effective operator is 61 and by ineffective operators is 6. This is a large difference.
- Since most calls are outgoing, this is the metric to focus on when evaluating an operator's performance.

Answer success rate (ASR)

- A suggested metric to measure outgoing calls.
- ASR of an effective operator is 32 calls per day and by ineffective operators is only 3.5.

Recommendations:

- Check missed calls (abandonment rate) on the company level and not on the operator level.
- Each operator should only make one type of call (incoming or outgoing). This will decrease the call abandonment rate.
- Put emphasis on outgoing calls.
- Put emphasis on improving the operators working with clients with tariff plans B and C.



Thank you for
your attention!

