

Telecom: Identifying Ineffective Operators

Identify least effective operators for CallMeMaybe company.

Measures of operators' inefficiency

Missed calls

If operator miss too many calls, he/she may be considered ineffective

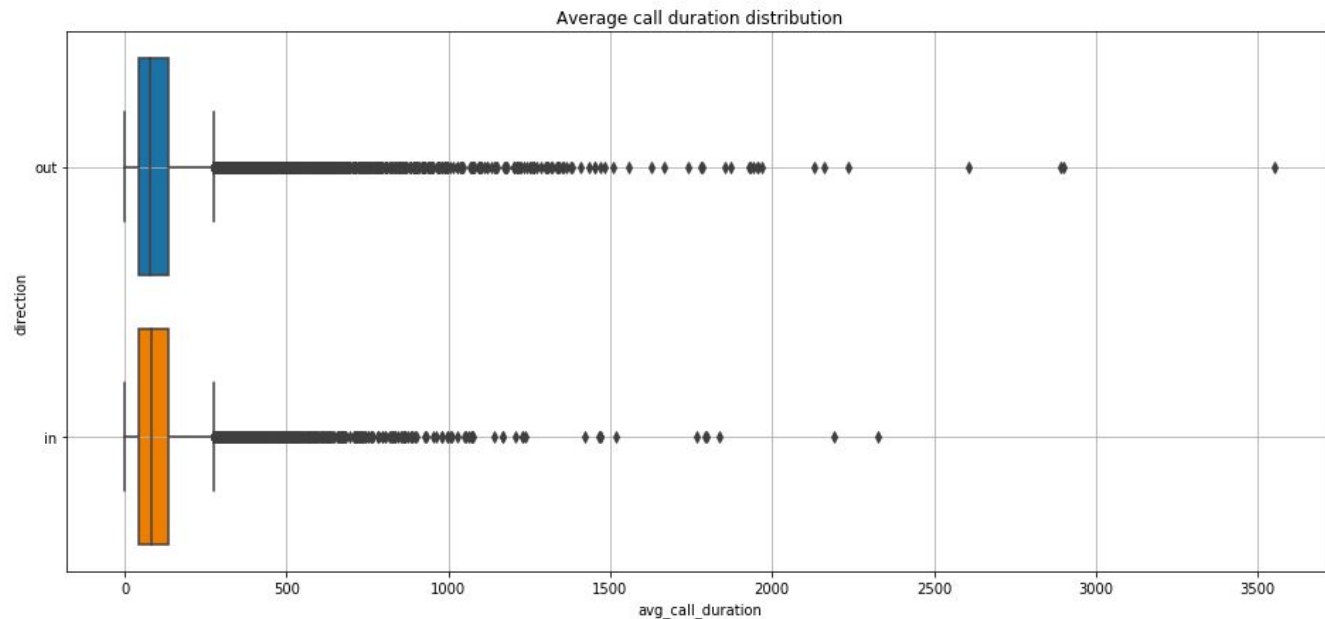
Long waiting time

If on average calls received by an operator has long waiting time, he/she may be considered ineffective

Outgoing calls

If operator is supposed to make outgoing calls, but makes too few, he/she may be considered ineffective

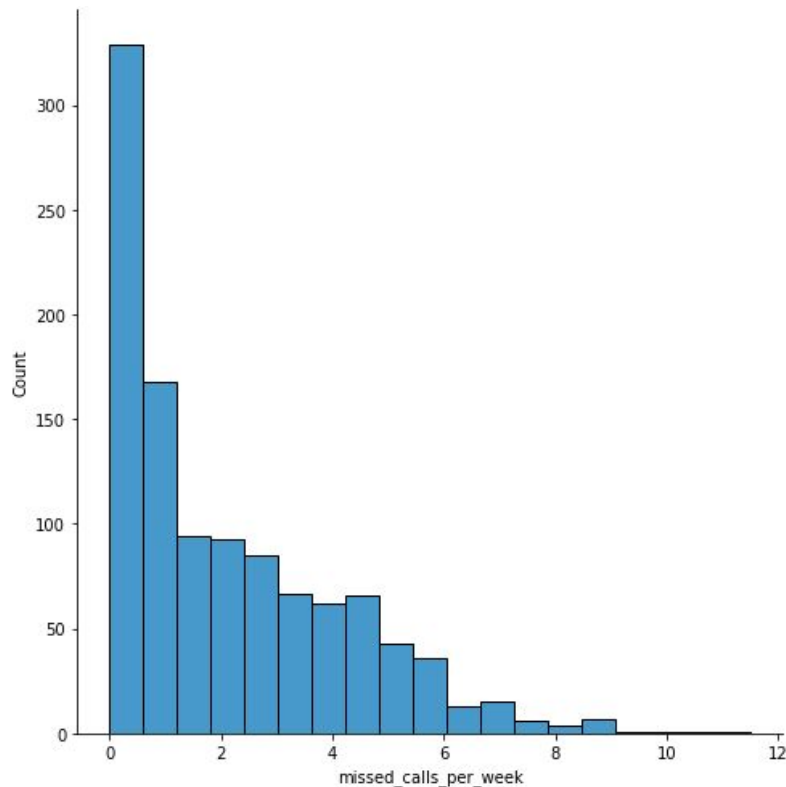
Call duration distribution



- Average duration for outgoing calls: 112 s.
- Average duration for incoming calls: 121 s.

95% of calls were shorter than 341 seconds.

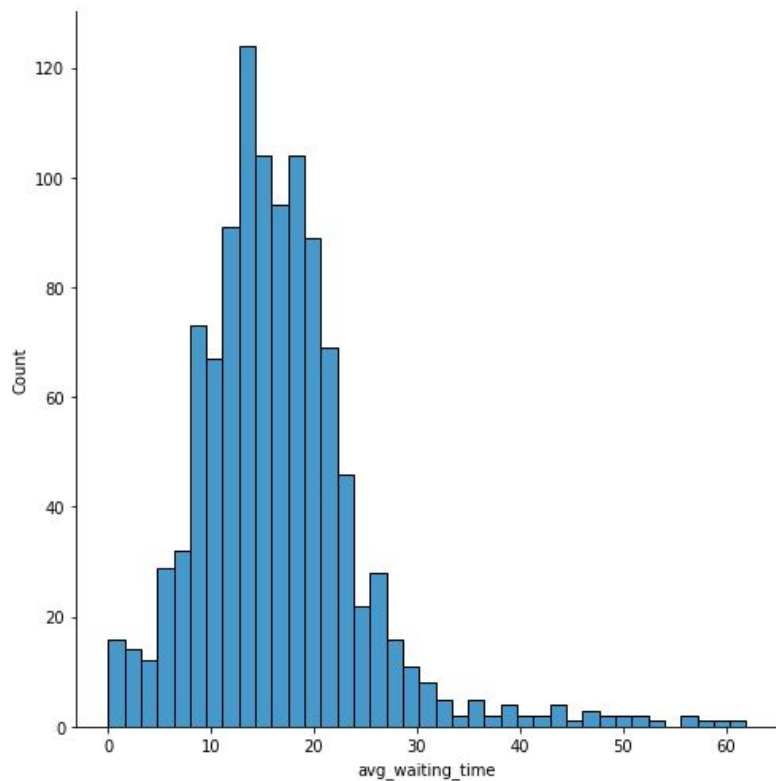
Missed calls distribution



- There are many operators who have very low number of missed calls;
- Median operator misses only 1.5 call per week;
- 95% of operators on average less than 6 calls in a week;

Ineffective operator misses 6 and more calls a week.

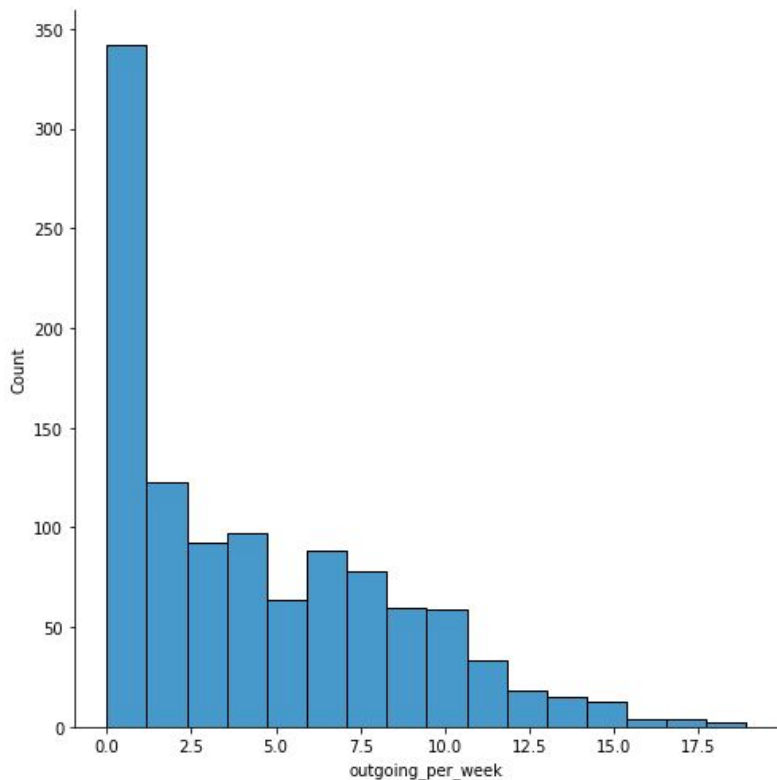
Waiting time distribution



- Average waiting time is 16.6 seconds;
- 95% of operators on have waiting time less than 29 seconds.

Ineffective operator is considered to have waiting time more than 32 seconds.

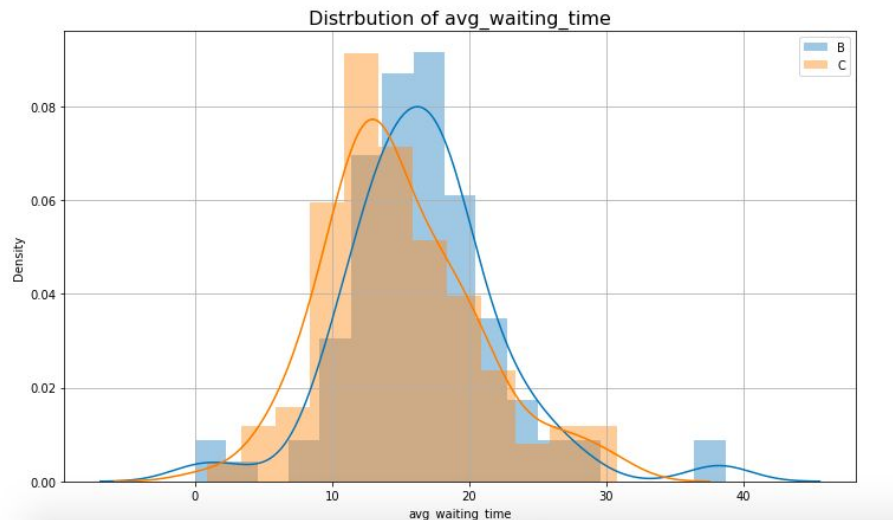
Number of outgoing calls distribution



- Average number of outgoing calls for operators that make them is 5.7;
- 95% of operators make not less than 2 calls

Ineffective operator is considered to be the one who makes less than 2 calls in a week.

Analysis of operators' work for different tariffs



After performing A/B testing of distribution of average waiting time and number of missed calls for different tariffs, it's been found that there is statistically significant difference in distributions for users of different tariffs.

Conclusion. Operators that work with different types of clients may have different thresholds for effectiveness.

Note. Other measures that weren't taken into account during this analysis may also affect effectiveness of operators.

Extra. 5 tips for increasing operators' productivity

1. Give your operators autonomy;
2. Allow operators to take frequent, short breaks;
3. Measure operators performance and reflect together;
4. Be sure to recognize a job well done;
5. Develop multi-channel operators.

Conclusion

Efficient Operator Measures

Effective operator

1. Has waiting time less 32 seconds;
 2. Misses less than 6 calls per week;
 3. If they make outgoing calls they make more than 2 a week.
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