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| reporting and visualization PROJECT  A logo for a service  Description automatically generated  Report |
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A person standing in front of a window looking out to a city

Description automatically generated

This report is designed to provide ServiceSpot call center with an in-depth and comprehensive analysis to enhance the decision-making process within the company. It is structured to cover the following pages: a general Overview, Team's Performance, Calls Frequency, KPI’s, and Revenue.

### **Overview**

### Between January 2018 and December 2021, several key trends in call volumes and average wait times emerged. The highest number of calls was recorded in March 2018, with 3,028 calls, while February 2018 saw the lowest call volume, with only 2,405 calls. From January 2018 to December 2020, the average wait time fluctuated between 24 and 29 minutes, reaching its peak in January 2021 at 38 minutes. Additionally, the predominant category of calls received during this period was tech support, attaining 66,211 calls and generating a significant charged amount of $880K. These insights underscore the high demand for technical assistance and highlight the necessity to address the average wait time, which experienced a significant increase in the past year.

### **Team’s Performance**

### **NB:** A new column (ManagerUPN) has been added to the Employees table to establish role-based security. This addition restricts performance visibility to team managers for their direct reports only.

### During this period, the highest number of calls received was attributed to manager Ardath Ducharme, with 14,533 calls. His team handled 7,189 tech support calls (49.5% of the total), with 233 of them abandoned. They also managed 4,885 billing calls (33.6% of the total), with 295 abandoned, and 2,459 sales calls (16.9% of the total), with 147 abandoned. The top-performing employee on his team is Blythe Welles, who handled 2,003 calls.

### **Call Frequency**

### Among the years, we can clearly notice a peak of calls on the first days of the following months: March, May, July, September, and December, with a record of 193 calls on July 1st, 2019.

### This peak is the most important for Tech Support calls.

### In terms of numbers of calls per hour, in 2018 we could notice some variations. However, since 2019, it is quite homogeneous.

### When we have a look at calls for 2021, the line is the same as 2020, so we may question ourselves on the accuracy of the data for 2021. After investigating, the calls timestamps are the same in 2020 and 2021 data files, so we may wonder if the 2021 data is a copy of the 2020.

### **KPIs**

### Wait Time: for 2018, 2019 and 2020 the average wait time is about 27 seconds. In 2021, it increases by 10 seconds. The minimum wait time also goes from 0 to 10 seconds between these two periods.

### There are no big variations between the sites and the call types.

### Call Duration: we can notice the same discrepancies between the period 2018, 2019 and 2020 (average call duration of about 12 minutes 26 seconds to 12 minutes 29 seconds) and the year 2021 (average call duration of 12 minutes and 44 seconds). In the same way the minimum call duration went from 0 to 15 seconds.

### Abandoned calls: on average, 6% of the calls are abandoned, mostly Tech Support calls. Jacksonville’s site has the most abandoned calls, and Aurora’s site has the least. In general, Sales’ calls have a lower rate of abandoned calls.

### **Revenue**

### We defined a new measure “Charged amount” to calculate the amount that each call was charged to the customer depending on the year and the duration of the call.

### Between 2018 and 2021, the charged amounts have shown a consistent year-over-year increase. The call type with the highest charge for ServiceSpot was tech support, with charges ranging from $204,000 to $243,000. Notably, the state with the highest charged amount was South Florida, particularly for tech support calls, which totaled $72,000 to $88,000. Finally, the longest average call duration was recorded in South Florida for sales calls, maintaining an approximate duration of 780 seconds (about 13 minutes) over two consecutive years 2020 and 2021.

### This analysis should be taken with caution as the data received for 2021 must be verified.