

# Call Center Samples

*Team content > Samples > By business function > Customer experience*

November 2021

# Introduction

- For the Customer Experience business function, the **Call Center** set of samples illustrate the use of **KPIs** (Key Performance Indicators) in dashboards and reports.
- The dashboards demonstrate the KPI visualization, and the data module demonstrates how to create target values

# Theory and KPIs

KPI	Description	Target
<b>Occupancy %</b>	The amount of time that agents are on the phone answering live calls, as well as completing additional work associated with these calls, compared to the agent's total shift time	75.0% for all shifts
<b>SLA % (Service Level Agreement)</b>	The percentage of calls that are answered within a specified number of seconds.	80.0% of all calls
<b>Quality %</b>	The percentage of callers that were satisfied with the quality-related aspects of the call, as determined by a Customer Satisfaction survey. Call quality measures the efficiency and effectiveness of the conversation regarding politeness, professionalism, knowledge, understanding, timeliness, problem solving, and the final solution. The caller felt like they had a positive experience, the solution was effective, and if applicable they can prevent the issue from reoccurring in the future. This is related to <b>Customer Satisfaction %</b> .	90.0% of all rated calls
<b>ATT (Agent Talk Time - Minutes)</b>	The average amount of time the agent is on the phone answering a live call. It includes any time that the caller is placed on hold.	15 minutes per call
<b>ACW (After Call Work Time -Minutes)</b>	Measures the average amount of time the agent spends on activities after a live call is over. These activities typically include updating databases, documents, or memos, sending emails or messages, and informing teammates/supervisors about the call.	5 minutes per call

KPI	Description	Target
<b>AHT</b> <b>(Average Handle Time - Minutes)</b>	Measures the average elapsed time from when an agent answers a call, places the caller on hold if necessary, and then eventually disconnects when a solution is reached. It also includes any After Call Work Time. The formula is <i>ATT + ACW</i>	20 minutes per call
<b>ATT</b> <b>(Agent Talk Time - Minutes)</b>	Measures the average amount of time the agent is on the phone answering a live call. It includes any time that the caller is placed on hold.	15 minutes per call
<b>ASA</b> <b>(Average Speed of Answer - Seconds)</b>	The average time for calls to be answered in the call center during a specific time frame. This includes the caller's time spent waiting in the queue, and the time while the agent's phone rings. It does not include the initial time spent by the caller to navigate through the automated Interactive Voice Response (IVR) system.	20 seconds per call
<b>Customer Satisfaction %</b>	The percentage of callers that were satisfied with their overall experience, as determined by a Customer Satisfaction survey. This is related to <b>Quality %</b> .	85.0% of all rated calls
<b>Abandonment %</b>	The percentage of callers who hang up before reaching an agent.	2.0 % of all calls
<b>FCR %</b> <b>(First Call Resolution)</b>	The percentage of calls that were resolved on first contact.	80.0% of all calls

Samples

- **2 Dashboards**

- Team content > Samples > By business function > Customer experience > Dashboards > Agent quarterly performance
- Team content > Samples > By business function > Customer experience > Dashboards > Call center YTD performance

- **1 Report**

- Team content > Samples > By business function > Customer experience > Reports > Daily agent activity

- **Data**

- This sample data module contains representative call center data from a fictional mobile phone service provider.
  - Team content > Samples > By business function > Customer experience > Data > Call center
  - Team content > Samples > By business function > Customer experience > Data > Source files > Call\_Center.zip


# Agent quarterly performance

Dashboard



Current Quarter Performance | YTD Comparison

**Claudine Chaperlin (32100)**



**81.6%** ⬇️  
Occupancy %  
75.0% (+8.78%)

**97.0%** ⬇️  
SLA %  
80.0% (+21.25%)

**85.5%** ⬇️  
Quality %  
90.0% (-5%)

**1,433**  
Total Calls

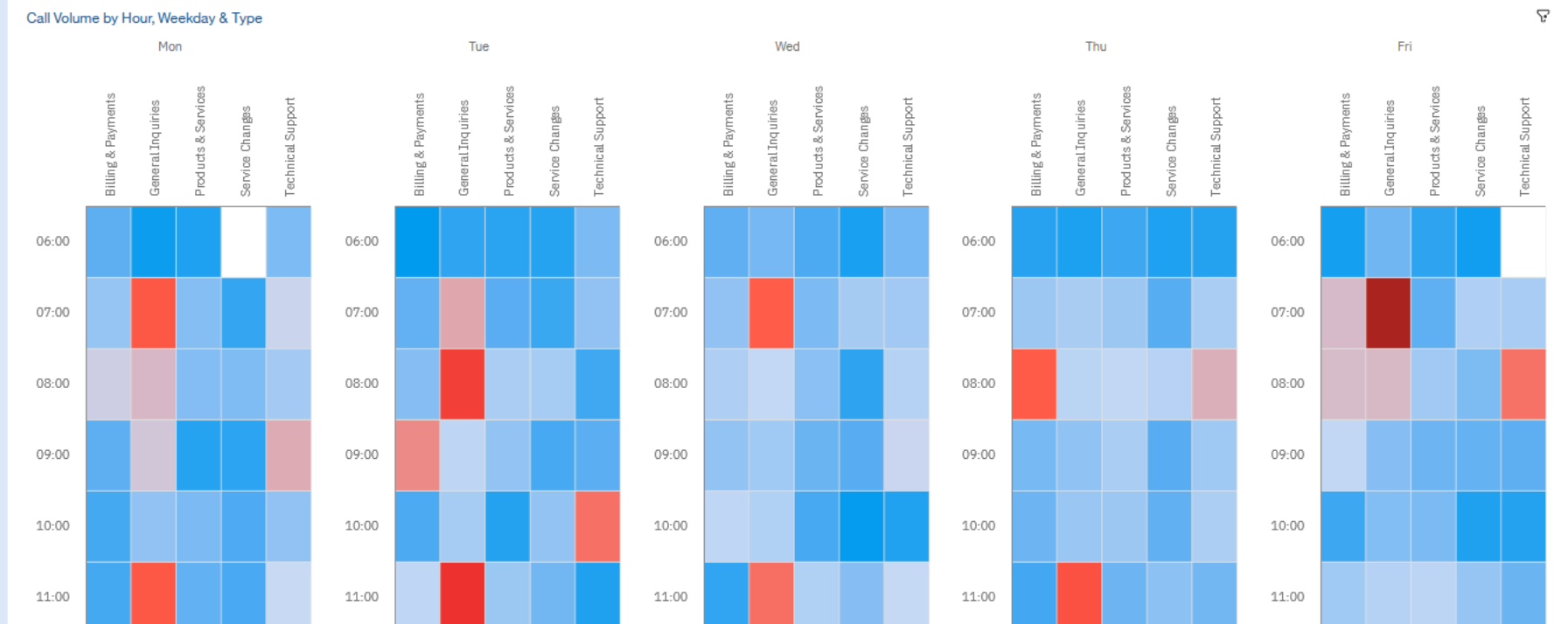
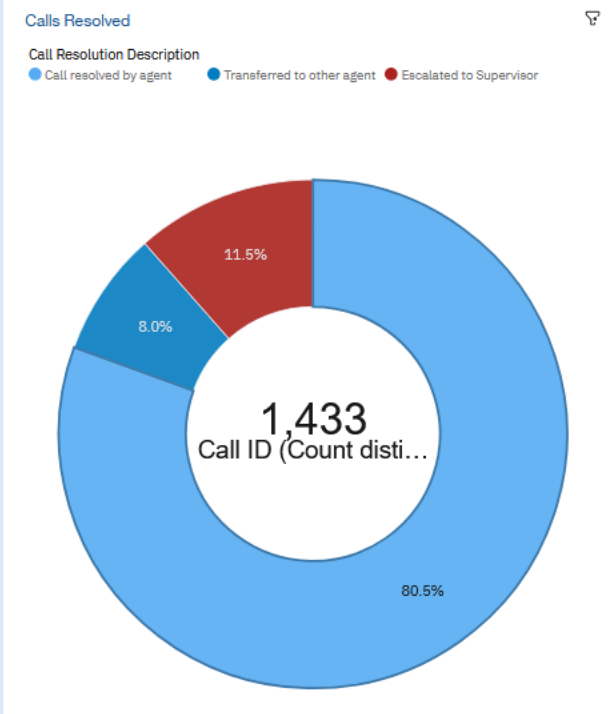
**\$5.24** ⬇️  
AVG Cost/Call  
7.5 (-30.15%)

**12.03** ⬇️  
ATT (minutes)  
15 (-19.77%)

**3.51** ⬇️  
ACW (minutes)  
5 (-29.82%)

**15.54** ⬇️  
AHT (minutes)  
20 (-22.28%)

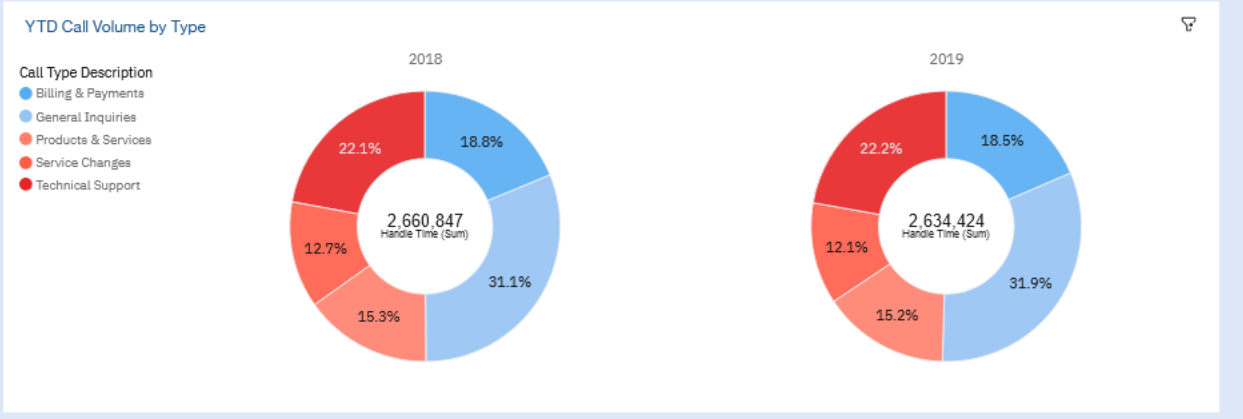
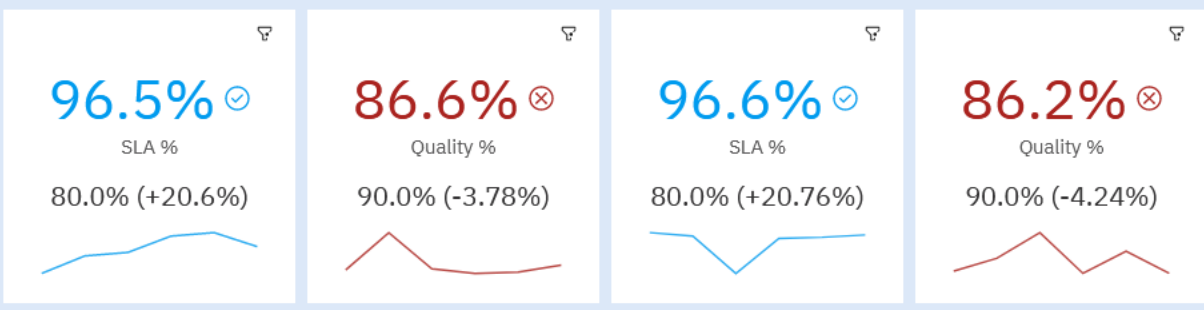
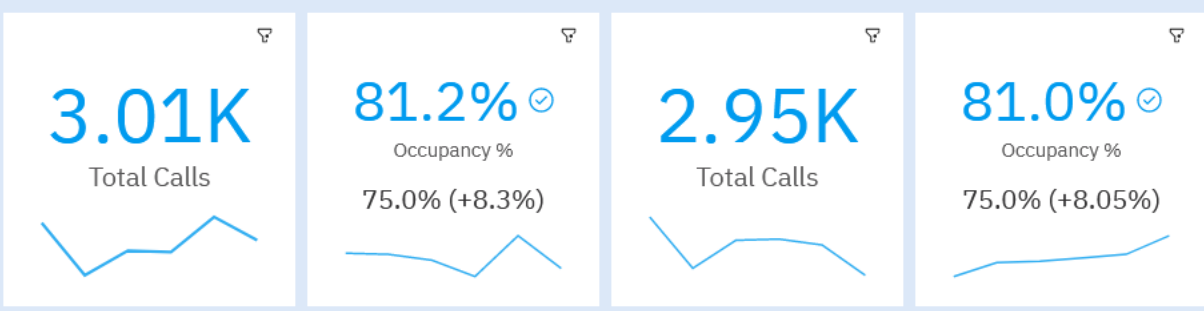
**12** ⬇️  
ASA (seconds)  
20 (-41.55%)



Current Quarter Performance | YTD Comparison

**Claudine Chaperlin (32100)**

2018 YTD | 2019 YTD



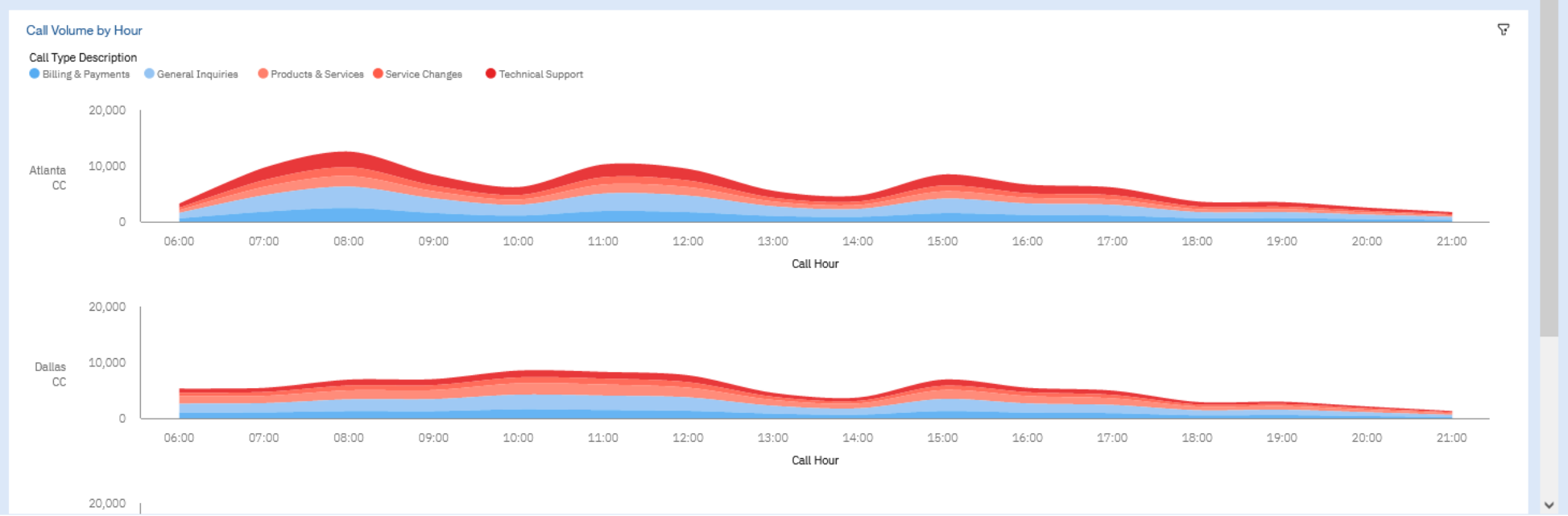
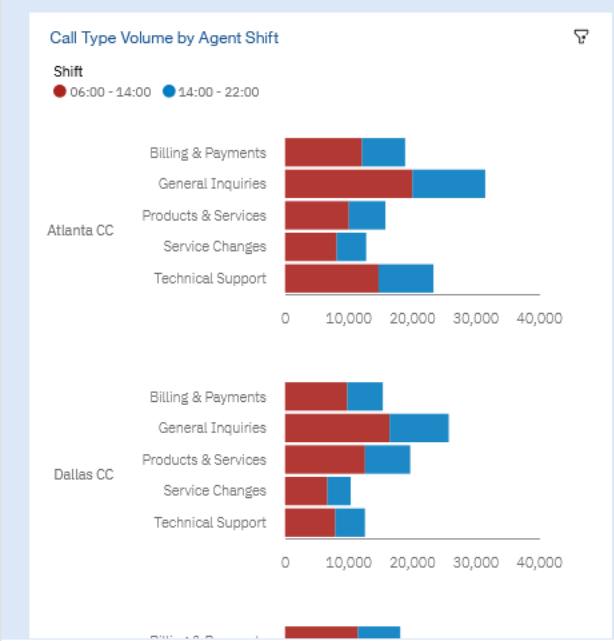
Call Month Name	Call Calendar Year	Total Calls	ATT (minutes)	ACW (minutes)	AHT (minutes)	ASA (seconds)	FCR %	SLA %	Occupancy %	Quality %	AVG Cost/Call	Customer Satisfac...	Abandonment %
January	2018	531	11.52	3.32	14.85	12	82.7%	94.9%	81.6%	85.9%	5.003	76.5%	4.9%
	2019	564	10.60	3.08	13.68	12	85.5%	97.3%	79.9%	84.8%	4.71	78.0%	2.7%
February	2018	454	11.63	3.44	15.07	12	83.9%	96.0%	81.4%	91.1%	5.088	81.5%	4.0%
	2019	441	11.94	3.44	15.39	12	83.7%	97.1%	80.8%	86.4%	5.238	81.2%	2.9%

# Call center YTD performance

Dashboard

KPI Summary | Agent Summary | Customers & Plans

KPI Summary	Call Center Volume	Service Level Excellence		Call Performance		
<b>Sites</b> Atlanta CC Dallas CC Phoenix CC	<b>114</b> Total Agents	<b>266K</b> Total Calls	<b>74.5%</b> ⊗ SLA % 80.0% (-6.88%)	<b>75.1%</b> ⊗ FCR % 80.0% (-6.1%)	<b>14.17</b> ✓ ATT (minutes) 15 (-5.56%)	<b>4.11</b> ✓ ACW (minutes) 5 (-17.76%)
	<b>78.7%</b> ✓ Occupancy % 75.0% (+4.98%)	<b>3.0%</b> ⊗ Abandonment % 2.0% (+51.04%)	<b>89.4%</b> ⊗ Quality % 90.0% (-0.65%)	<b>67.4%</b> ⊗ Customer Satisfaction % 85.0% (-20.65%)	<b>18.28</b> ✓ AHT (minutes) 20 (-8.61%)	<b>16</b> ✓ ASA (seconds) 20 (-22.19%)



All tabs | No filters have been applied. | This tab | Call Calendar Year: 2019 | Site: All | Supervisor: All | Schedule: All | Shift: All

KPI Summary | **Agent Summary** | Customers & Plans

Agent Summary | SLA % | FCR % | Occupancy %

Sites

- Atlanta CC
- Dallas CC
- Phoenix CC

Top 5 Agents

Rank (SLA %)	Agent	SLA %
1	Otes Harms	98.4%
2	Stirling Charlick	98.4%
3	Octavius Jerdein	98.3%
4	Bald Acome	98.3%
5	Henry Schuster	98.2%

Top 5 Agents

Rank (FCR %)	Agent	FCR %
1	Marius Metham	85.0%
2	Rollo Sammonds	84.4%
3	Jobi Chritchley	84.3%
4	Anderea Wadelin	84.3%
5	Henry Schuster	84.2%

Top 5 Agents

Rank (Occupancy %)	Agent	Occupancy %
1	Grayce Goffe	82.8%
2	Selig Pennacci	82.8%
3	Domenico McLorinan	82.5%
4	Sawyere Jossun	82.5%
5	Ashby Tottman	82.5%

Supervisor

- Arv Goatcher
- Cassandra Baulk
- Chris Matteuzzi
- Darlene Beyne
- Essa Glewe
- Franny Dabourne
- Kelcey Cale
- Marlane Chesshire
- Monika Halpeine
- Shari Bradnick
- Terrye McCloughlin
- Theodosia Seeger

Bottom 5 Agents

Rank (SLA %)	Agent	SLA %
1	Rudyard Jostling	47.7%
2	Staford Barnfield	47.8%
3	Munroe Morby	48.6%
4	Tresa McTeague	48.7%
5	Farlie Treweek	48.8%

Bottom 5 Agents

Rank (FCR %)	Agent	FCR %
1	Bevon Finby	47.1%
2	Stirling Charlick	47.1%
3	Alverta Minot	47.6%
4	Kristoforo Rolf	47.7%
5	Leandra Randalson	48.1%

Bottom 5 Agents

Rank (Occupancy %)	Agent	Occupancy %
1	Margot Simonian	73.5%
2	Anderea Wadelin	73.6%
3	Bald Acome	73.8%
4	Bevon Finby	73.8%
5	Muriel Radcliffe	74.1%

Agent KPI Summary

Agent	Supervisor	Site	SLA %	Quality %	FCR %	Customer Satisfaction %	Occupancy %	Total Calls
Otes Harms	Cassandra Baulk	Atlanta CC	98.4%	100.0%	83.4%	50.1%	76.5%	1,715
Stirling Charlick	Terrye McCloughlin	Atlanta CC	98.4%	84.7%	47.1%	49.0%	75.5%	1,677
Octavius Jerdein	Cassandra Baulk	Atlanta CC	98.3%	86.6%	83.2%	48.9%	74.2%	1,609
Bald Acome	Cassandra Baulk	Atlanta CC	98.3%	85.8%	83.4%	47.7%	73.8%	1,642
Henry Schuster	Marlane Chesshire	Phoenix CC	98.2%	87.3%	84.2%	47.8%	74.5%	1,691
Gilda Hayles	Theodosia Seeger	Phoenix CC	98.2%	100.0%	82.1%	80.8%	76.8%	1,684
Maribelle Malham	Terrye McCloughlin	Atlanta CC	98.2%	87.3%	66.2%	80.8%	77.2%	1,717
Amerigo Riediger	Cassandra Baulk	Atlanta CC	98.2%	86.5%	83.8%	49.9%	74.4%	1,604

All tabs | No filters have been applied.

This tab | Call Calendar Year: 2019 | Site: Atlanta CC, Dallas CC, Phoenix CC

KPI Summary | Agent Summary | **Customers & Plans**

Customers & Plans

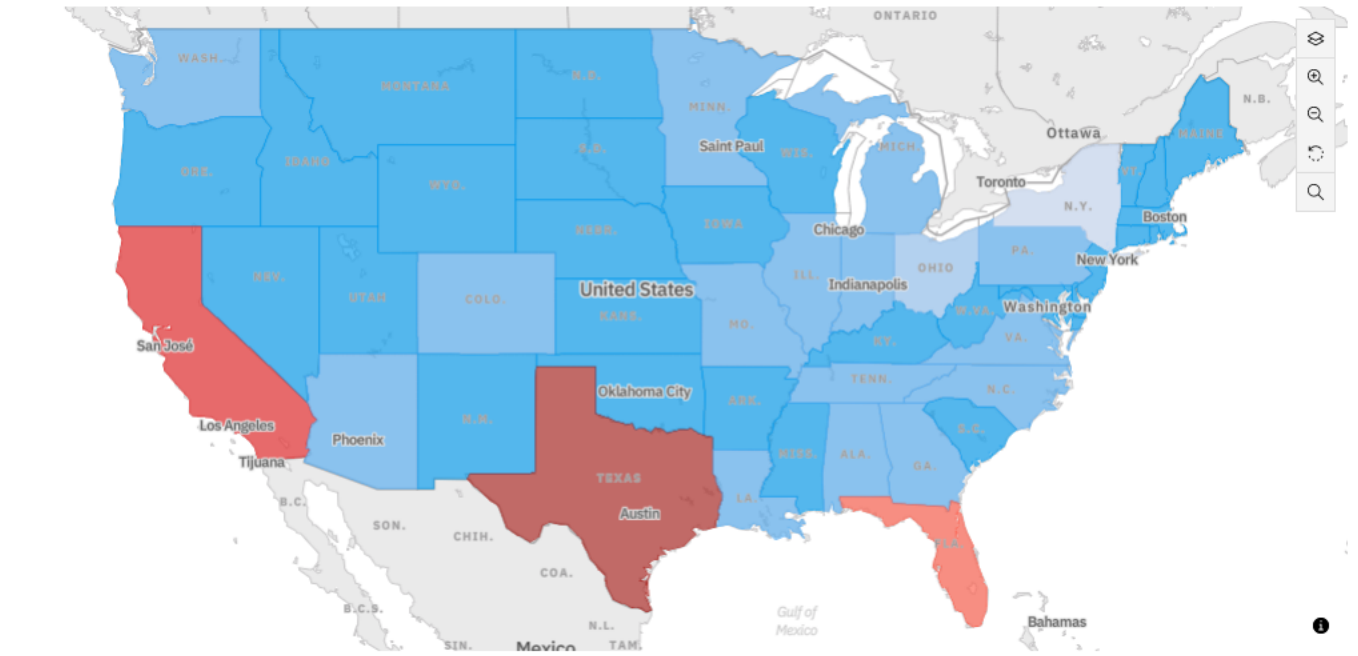
- Sites
- Atlanta CC
  - Dallas CC
  - Phoenix CC

**67.4%** ⊗  
 Customer Satisfaction %  
 85.0% (-20.65%)

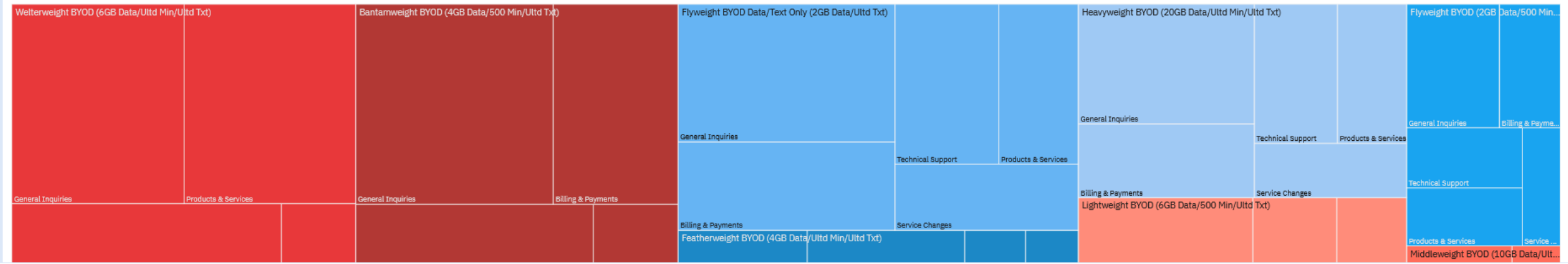
Call Volume & Satisfaction %

State	Customer Satisfaction %
South Dakota	71.2%
Delaware	70.1%
Tennessee	68.7%
Kansas	68.5%
West Virginia	68.5%
Massachusetts	68.5%
Oregon	68.4%
Nebraska	68.2%
Washington	68.0%
Michigan	68.0%
Arizona	67.9%
Utah	67.9%
Minnesota	67.9%
Florida	67.8%
Nevada	67.8%
New Jersey	67.8%

Customer Call Origin by State



Customer Call Volume by Wireless Plan & Call Type



# Daily agent activity

Report

## Daily Agent Activity

Date:  📅 Refresh
Please note: Available dates are between January 01, 2018 and June 29, 2019.

Site	Total Calls	ATT (Minutes) Actual / Target	ACW (minutes) Actual / Target	AHT (minutes) Actual / Target	ASA (seconds)	FCR %	SLA %	Occupancy %	Quality %	AVG Cost/Call	Abandonment %	Customer Satisfaction %
Atlanta CC	416	<b>13.9</b> 15.0	<b>4.0</b> 5.0	<b>18.0</b> 20.0	11	72.6%	96.6%	80.9%	89.7%	\$6.68	3.1%	70.2%
Dallas CC	328	<b>14.6</b> 15.0	<b>4.2</b> 5.0	<b>18.8</b> 20.0	20	73.2%	47.6%	81.5%	92.9%	\$7.55	3.0%	72.3%
Phoenix CC	291	<b>15.2</b> 15.0	<b>4.4</b> 5.0	<b>19.7</b> 20.0	16	71.5%	68.4%	80.2%	86.4%	\$7.57	3.8%	64.3%

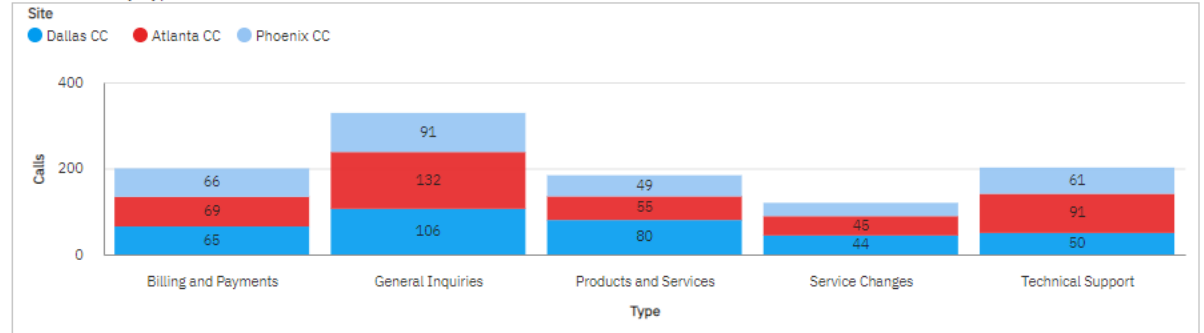
Agent ID	Agent	Total Calls	ATT (minutes)	ACW (minutes)	AHT (minutes)	ASA (seconds)	FCR %	SLA %	Occupancy %	Quality %	AVG Cost/Call	Abandonment %	Customer Satisfaction %
<b>Atlanta CC</b>													
Shift/Supervisor: 06:00 - 14:00 / Kelcey Cale													
32020	Mallissa Gwilt	23	11.8	3.5	15.3	13	82.6%	95.7%	83.6%	100.0%	\$5.42	4.3%	91.3%
32060	Reade Waggett	24	11.0	3.0	14.0	12	87.5%	100.0%	79.8%	91.7%	\$5.19	0.0%	54.2%
32080	Shamus Chatt	27	10.1	2.8	12.9	12	77.8%	96.3%	82.8%	100.0%	\$4.61	3.7%	51.9%
32000	Sawyer Jossam	16	14.9	3.9	18.8	11	81.2%	100.0%	71.5%	88.9%	\$7.22	0.0%	37.5%
32040	Chick Sigert	24	10.6	3.2	13.8	9	87.5%	95.8%	79.0%	100.0%	\$4.81	0.0%	62.5%
32100	Claudine Chaperlin	24	11.8	3.6	15.4	12	91.7%	100.0%	88.0%	100.0%	\$4.81	0.0%	91.7%
32120	Leon Klambt	26	10.2	2.9	13.1	11	65.4%	92.3%	80.9%	80.0%	\$4.44	7.7%	42.3%
32140	Avril Haslock(e)	28	9.2	2.8	12.0	12	89.3%	89.3%	80.0%	81.8%	\$4.45	10.7%	64.3%
32160	Hildagarde Iglesia	27	9.3	2.8	12.1	12	81.5%	96.3%	78.0%	71.4%	\$4.99	3.7%	74.1%
32180	Katleen Powdrell	21	12.1	3.7	15.8	11	71.4%	95.2%	79.0%	83.3%	\$5.50	4.8%	52.4%
32200	Brit Bram	20	13.4	4.0	17.4	11	60.0%	90.0%	83.0%	90.0%	\$7.56	10.0%	80.0%
Shift/Supervisor: 14:00 - 22:00 / Terrye McCloughlin													



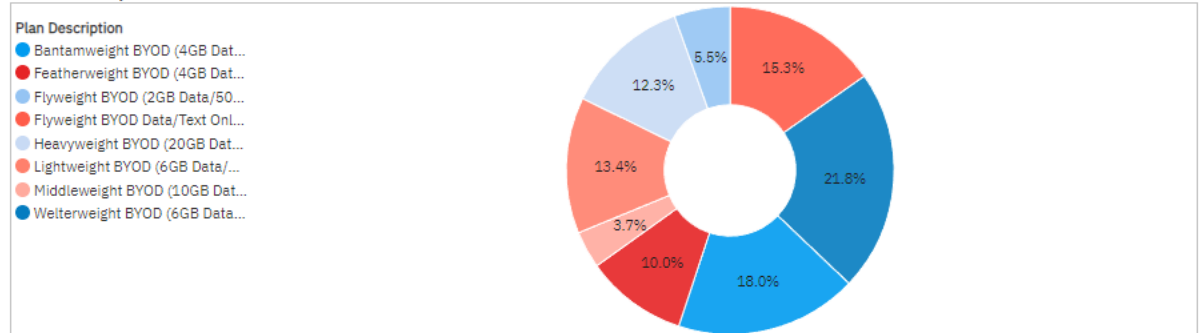
### Daily Agent Activity

Date:   Please note: Available dates are between January 01, 2018 and June 29, 2019.

Call Volume by Type



Call Volume by Wireless Plan



Call ID	Start Time	End Time	Queue Time (Seconds)	Talk Time (Minutes)	ACW Time (Minutes)	Call Type Description	Call Resolution Description	Customer ID	Customer	Phone	Plan ID	Plan Description
<b>Atlanta CC</b>												
Shift/Supervisor: 06:00 - 14:00 / Arv Goatcher												
Agent: 32220 - Mora Barkess												
11125131	7:43:34	7:50:51	13	7.3	2.6	Technical Support	Call resolved by agent	324666	Brynne Le Brun	509-555-2126	800001005	Lightweight BYOD (6GB Data/500 Min/Ultd Txt)
11125015	8:06:34	8:16:10	11	9.6	3.0	General Inquiries	Call resolved by agent	362129	Edwin Gridley	907-555-2562	800001004	Featherweight BYOD (4GB Data/Ultd Min/Ultd Txt)
11125211	8:20:39	8:23:37	3	3.0	1.2	Billing and Payments	Call resolved by agent	346148	Randolph Van der Kruys	408-555-8405	800001006	Welterweight BYOD (6GB Data/Ultd Min/Ultd Txt)
11124901	8:32:58	8:37:06	15	4.1	0.9	General Inquiries	Call resolved by agent	358149	Karlee Fosdike	559-555-4043	800001001	Flyweight BYOD Data/Text Only (2GB Data/Ultd Txt)
11124864	8:33:59	8:43:56	13	10.0	3.3	Products and Services	Call resolved by agent	384188	Pete Demcik	786-555-8768	800001001	Flyweight BYOD Data/Text Only (2GB Data/Ultd Txt)
11125248	9:35:12	9:51:08	11	15.9	6.5	Billing and Payments	Call resolved by agent	304170	Nickey Beccera	502-555-8569	800001004	Featherweight BYOD (4GB Data/Ultd Min/Ultd Txt)
11124950	9:35:28	9:41:42	13	6.2	1.8	General Inquiries	Escalated to supervisor	397860	Beryle Bellenie	630-555-8369	800001006	Welterweight BYOD (6GB Data/Ultd Min/Ultd Txt)
11125214	9:39:24	9:58:27	12	19.0	6.0	General Inquiries	Call resolved by agent	392942	Ana Blundan	216-555-1683	800001002	Flyweight BYOD (2GB Data/500 Min/Ultd Txt)
11125329	9:51:23	9:58:25	8	7.0	1.4	General Inquiries	Call resolved by agent	386457	Gaelan Dockray	605-555-9264	800001005	Lightweight BYOD (6GB Data/500 Min/Ultd Txt)
11125262	10:00:13	10:09:10	3	9.0	2.7	General Inquiries	Call resolved by agent	386622	Eddy Bowbrick	520-555-1013	800001001	Flyweight BYOD Data/Text Only (2GB Data/Ultd

Data



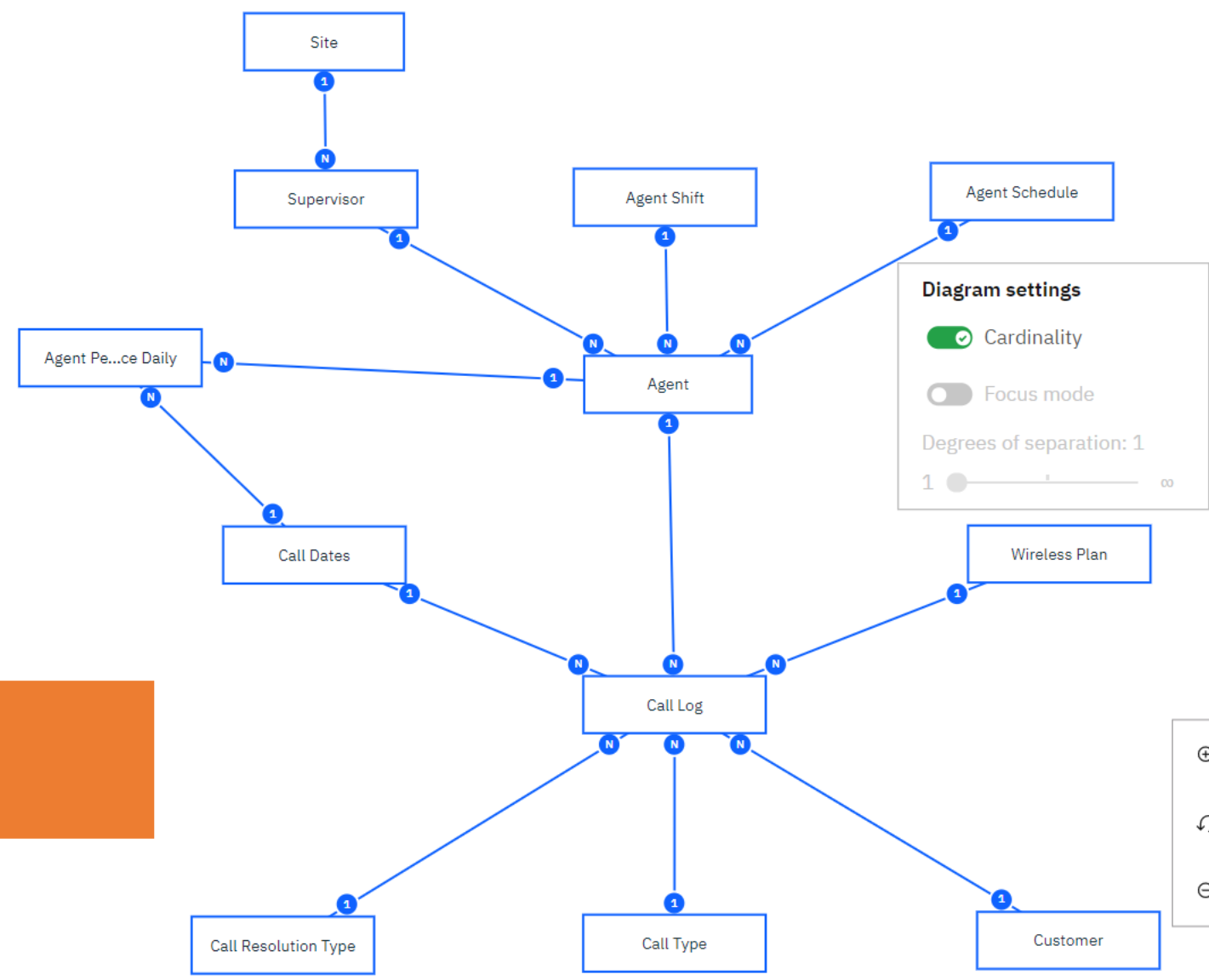
Properties

- Sources**
- Search
- Call\_Center.zip
    - Agent
    - Agent\_Performance\_Daily
    - Agent\_Shift
    - Call\_Resolution\_Type
    - Call\_Type
    - Customer
    - Date
    - Schedule
    - Site
    - Supervisor
    - Wireless\_Plans
    - call\_log

- Data module**
- Search
- Call center
    - Navigation paths
    - Agent
    - Agent Shift
    - Agent Schedule
    - Supervisor
    - Site
    - Customer
    - Call Dates
    - Call Type
    - Call Resolution Type
    - Wireless Plan
    - Agent Performance Daily
    - Call Log

Data Module

Grid Relationships Custom tables



**Diagram settings**

- Cardinality
- Focus mode

Degrees of separation: 1

1  ∞

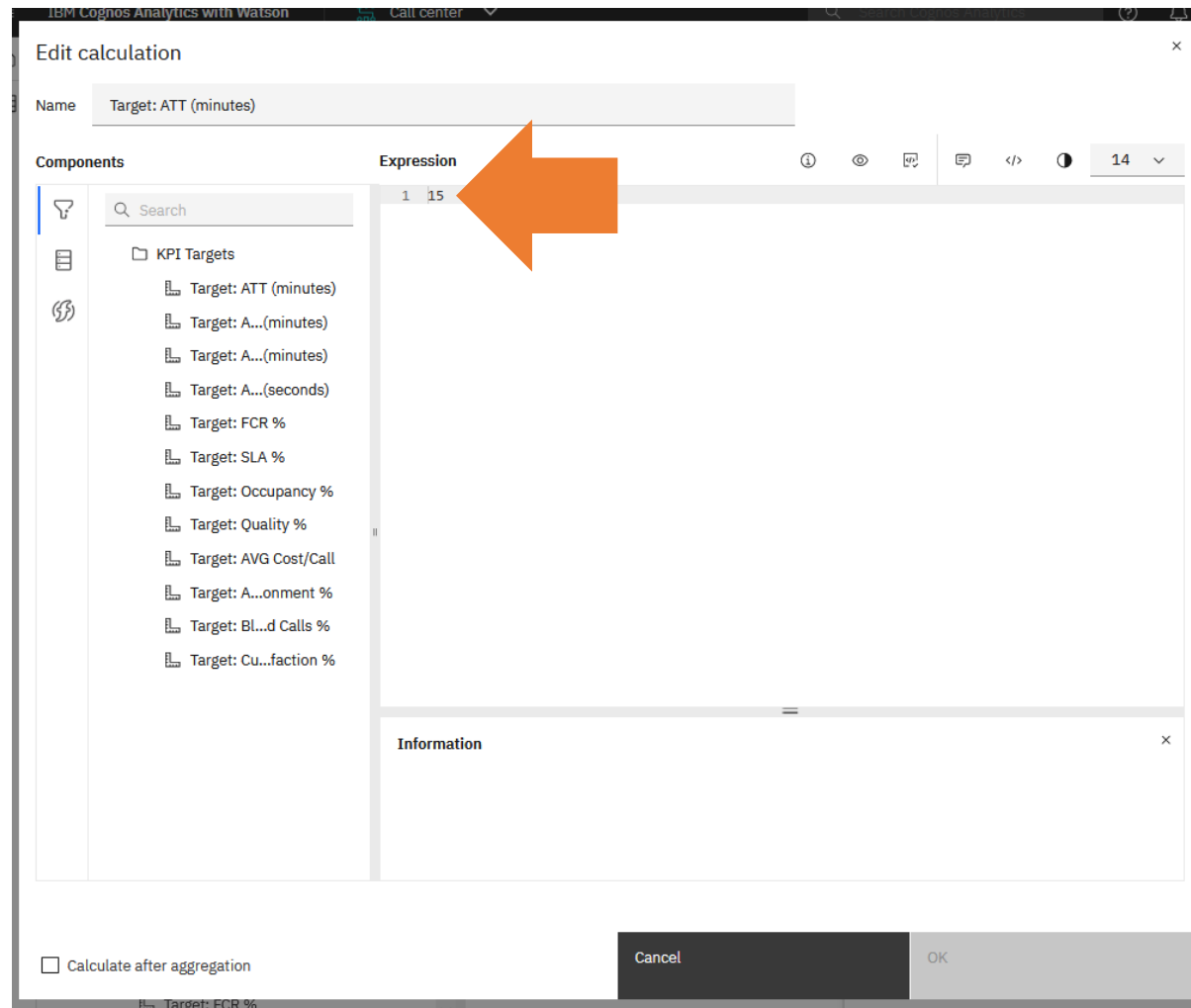


# Targets

- In the data module, within the *Agent Performance Daily* table, there is a folder named *KPI Targets*
  - This folder contains a set of measures (in the form of Calculations) that specify the targets for each KPI (see next slide)



In each case, the calculation assigns the target number or percentage:



# Core Data

## Agent\_Performance\_Daily.csv

- Contains aggregated information about an agent for call dates between January 01, 2018 and June 30, 2019. There are 44,461 rows
  - Agent\_ID
  - Call\_Date
  - Talk\_Time
  - After\_Call\_Work\_Time
  - Handle\_Time
  - Queue\_Time
  - Agent\_Shift\_Time
  - Agent\_Shift\_Cost
  - Total\_Calls
  - Total\_Service\_Level\_Calls
  - Total\_First\_Call\_Resolutions
  - Total\_Abandoned\_Calls
  - Total\_Blocked\_Calls
  - Total\_Customer\_Satisfied – number of callers who filled in the Customer Satisfaction Survey with a positive satisfaction rating
  - Total\_Quality\_Scored Satisfied – number of callers who filled in the Customer Satisfaction Survey
  - Total\_Quality\_Calls Satisfied – number of callers who filled in the Customer Satisfaction Survey with a positive quality rating

# Core Data (cont'd)

## call\_log.csv

- Contains row-level information about individual calls between January 01, 2018 and June 30, 2019. There are 805,046 rows
  - Call\_ID
  - Agent\_ID
  - Call\_Date
  - Start\_Date\_Time
  - Start\_Time
  - End\_Date\_Time
  - End\_Time
  - Talk\_Time
  - After\_Call\_Work\_Time
  - Queue\_Time
  - Agent\_Comments
  - Call\_Resolution\_ID
  - Call\_Type\_ID
  - Customer\_ID
  - Plan\_ID
  - Customer\_Satisfied - did the caller fill in the Customer Satisfaction Survey with a positive satisfaction result?
  - Quality\_Scored - did the caller fill in a Customer Satisfaction Survey?
  - Is\_Quality\_Call - did the caller fill in the Customer Satisfaction Survey with a positive quality result?