# Reference doc for call metrics

This reference document is a brief explanation of the various metrics generated for each call record.

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#### **METRICS Definitions**

#### **Overtalk metrics**

#### O-overtalk-incidents

The number of times that the agent and caller talked at the same time, expressed as an integer from zero to n.

#### O-A-overtalk-incidents

The number of times that the agent began talking while the caller was already talking, expressed as an integer from zero to n.

## O-C-overtalk-incidents

The number of times that the caller began talking while the agent was already talking, expressed as an integer from zero to n.

## O-overtalk-ratio

The percentage of the total call duration where the agent and caller talked at the same time, expressed as a number from 0 to 1 with .01 resolution, with 0.1 corresponding to overtalk for 10% of the call.

## O-A-overtalk-ratio

The percentage of the call where the agent and caller talked at the same time, and where the caller began talking first (e.g. the agent talked over the caller) expressed as a number from 0 to 1 with .01 resolution.

# O-C-overtalk-ratio

The percentage of the call where the agent and caller talked at the same time, and where the agent began talking first, expressed as a number from 0 to 1 with .01 resolution.

## Talk metrics

#### TTR-A-talk-ratio

The percentage of non-silence time that the agent was talking, expressed as a number from 0 to 1 with .01 resolution.

#### TTR-C-talk-ratio

The percentage of non-silence time that the caller was talking, expressed as a number from 0 to 1 with .01 resolution.

#### TTR-Silence-ratio

The percentage of time where neither the caller nor the agent were talking, expressed as a number from 0 to 1 with .01 resolution.

## TTR-Silence-incidents

The number of times that neither the agent nor the caller were talking, where the duration was >4 seconds, expressed as an integer from zero to n.

#### TTR-A-talk-rate

The average rate of speech for the agent over the entire call, with times when the other part is talking and significant pauses removed, expressed as word per minute (WPM) as an integer from zero to n.

#### TTR-C-talk-rate

The average rate of speech for the agent over the entire call, with times when the other part is talking and significant pauses removed, expressed as word per minute (WPM) as an integer from zero to n.

#### TTR-A-to-C-talk-rate-ratio

A measure of agent talk rate compared to the caller talk rate, expressed as ratio.

# TTR-A-intra-call-change-in-talk-rate

A measure of the talk rate for the agent, as measured above, from the first 1/3 of the call compared to the rate from the last 1/3 of the call, expressed as a number from zero to positive n, where 1.0 represents no change on talk rate and .3 represents a 70% decrease in talk rate.

# TTR-C-intra-call-change-in-talk-rate

A measure of the talk rate for the caller, as measured above, from the first 1/3 of the call compared to the rate from the last 1/3 of the call, expressed as a number from zero to positive n, where 1.0 represents no change in talk rate and .3 represents a 70% decrease in talk rate.

## TTR-A-average-streak

The average time for all streaks of an agent talking, expressed in seconds. A streak starts with the first word spoken by the caller at the beginning of a call or the next word spoken after a pause of 3 seconds or more and ends with a pause of 3 seconds or more or the end of the call.

## TTR-A-longest-streak

The total time for the longest streak of an agent talking, expressed in seconds. A streak starts with the first word spoken by the agent at the beginning of a call or the next word spoken after a pause of 3 seconds or more and ends with a pause of 3 seconds or more or the end of the call.

#### TTR-A-median-streak

The streak talking time value where half the agent talking streaks are below this value and half are above this value.

## TTR-Average-streak

The average time for all streaks of both an agent and a caller talking, expressed in seconds. A streak starts with the first word spoken by the caller at the beginning of a call or the next word spoken after a pause of 3 seconds or more and ends with a pause of 3 seconds or more or the end of the call.

## TTR-C-average-streak

The average time for all streaks of a caller talking, expressed in seconds. A streak starts with the first word spoken by the caller at the beginning of a call or the next word spoken after a pause of 3 seconds or more and ends with a pause of 3 seconds or more or the end of the call.

## TTR-C-longest-streak

The total time for the longest streak of a caller talking, expressed in seconds. A streak starts with the first word spoken by the caller at the beginning of a call or the next word spoken after a pause of 3 seconds or more and ends with a pause of 3 seconds or more or the end of the call.

# TTR-C-median-streak

The streak talking time value where half the caller talking streaks are below this value and half are above this value.

# TTR-Longest-streak

The total time for the longest streak of an agent or caller talking, expressed in seconds. A streak starts with the first word spoken by the caller at the beginning of a call or the next word spoken after a pause of 3 seconds or more and ends with a pause of 3 seconds or more or the end of the call.

#### TTR-Median-streak

The streak talking time value where half of all talking streaks are below this value and half are above this value.

# **Style metrics**

# TST-A-intra-call-change-in-pitch

A ratio for the intra call change in pitch of the agent where the ratio is calculated by taking the average pitch for the last third of the agent's words divided by the average pitch of the first third of the agent's words.

# TST-A-intra-call-change-in-relative-voice-volume-energy

A ratio for the intra call change in volume of the agent where the ratio is calculated by taking the average volume for the last third of the agent's words divided by the average volume of the first third of the agent's words.

# TST-A-relative-voice-volume-energy

The measure of how energetically an agent speaks. The metric is the average volume of the agent's words divided by a fixed average volume of a good agent (=4.33).

# TST-A-voice-dynamism-std-dev-score

The measure of the standard deviation for all the agent's words in a transcription.

# TST-C-intra-call-change-in-pitch

A ratio for the intra call change in pitch of the caller where the ratio is calculated by taking the average pitch for the last third of the agent's words divided by the average pitch of the first third of the caller's words.

# TST-C-intra-call-change-in-relative-voice-volume-energy

A ratio for the intra call change in volume of the caller where the ratio is calculated by taking the average volume of the last third of the caller's words divided by the average volume of the first third of the caller's words.

# TST-C-relative-voice-volume-energy

The measure of how energetically an agent speaks. The metric is the average volume of the agent's words divided by a fixed average volume of a good caller (=7.57).

# TST-C-voice-dynamism-std-dev-score

The measure of the standard deviation for all the caller's words in a transcription.

## **Sentiment metrics**

# S-A-intra-call-change-in-sentiment

A score that compares the sentence sentiment values of the agent for the first 3rd of the transcript to the last 3rd of the transcript.

#### S-A-sentiment

A score that computes all the sentence sentiment values of the agent for the transcript.

#### S-Call-sentiment

A score that computes all the sentence sentiment values for the transcript.

## S-Call-change-in-sentiment

A score that compares the sentence sentiment values for the first 3rd of the transcript to the last 3rd of the transcript.

## S-C-intra-call-change-in-sentiment

A score that compares the sentence sentiment values of the caller for the first 3rd of the transcript to the last 3rd of the transcript.

#### S-C-sentiment

A score that computes all the sentence sentiment values of the caller for the transcript.