

Conversation Analytics™ Indicator Syntax

How Does Conversation Analytics work?

Calls are processed using a proprietary transcription and search engine. This process identifies words and phrases that indicate certain events have occurred in a conversation. In addition to words, phonetic elements measure tempo, agitation and silence. Combinations of certain words/phrases with the phonetic elements (depending on the indicator) are matched and weighted to provide a numeric confidence indicator that the event occurred.

When writing search queries, our goal is to identify how many different ways one can say the same thing. It's also important to consider who is speaking, caller or agent. In the following example, you'll see part of an algorithm that takes into account various speech patterns and text-to-speech transcription possibilities.

Indicator: *Promotional Mention*

Phrase: *Did you receive a promotion from us?*

("did you|ya get|got|received|receive our|us") OR ("promotion|promotional|male|mail|mailer|flyer|flier|ad|add|advertisement from us|me") OR ("you|ya receive|received|receiving promotional email|male|mail|mailer|flyer|flier|ad|add|advertisement"), etc.

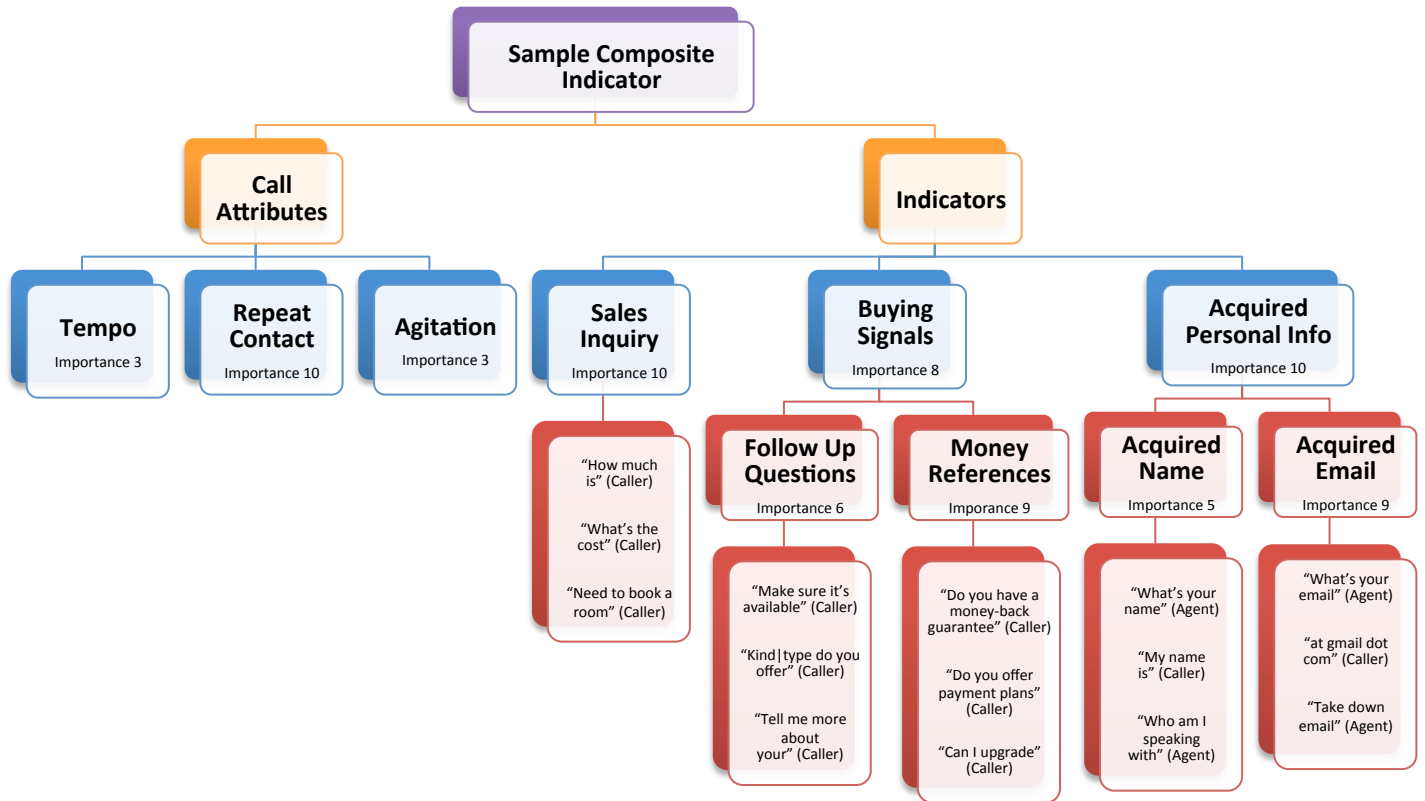
We also use proximity operators, "Not Near" operators, weights, importance levels and other elements to formulate complex algorithms to identify important factors of each call. With this methodology, we are able to obtain an 85%-90% accuracy rate for events that are identified. We have a high confidence level in trend analysis and our ability to identify trends in a data set of calls.

Indicator and Composite Indicator Tiered Algorithms

The sample above is only a portion of the algorithm used to identify the event that a phone agent asked the question "Did you receive a promotion from us?"

Indicators and Composite Indicators have a tiered, building block structure; phrases and phonetic elements create the algorithms that construct indicators; groups of indicators build other indicators; groups of indicators construct composite indicators. In addition, depending on the indicator, elements are assigned an importance rating. See the diagram on the next page for a partial construction of a composite indicator.

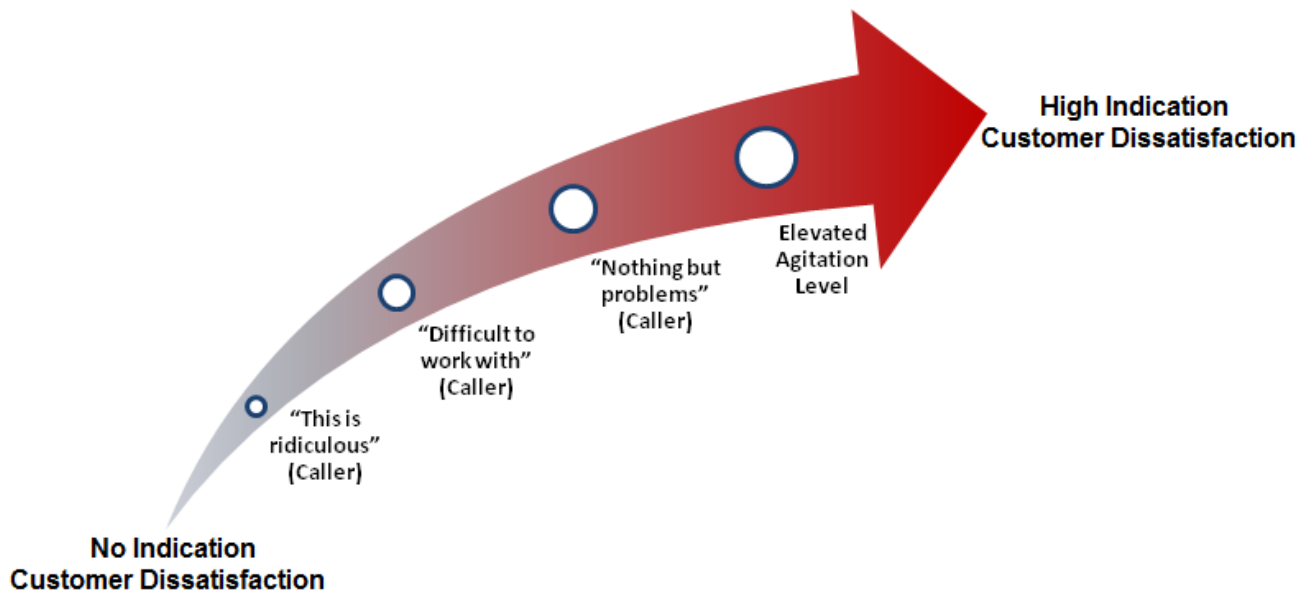
Indicator and Composite Indicator Tiered Algorithm Structure



Indicator Strengthening Factor

Certain indicators receive a full strength indication when a single item is identified in the phone call, such as the Acquired Phone Number indicator. Other indicators, such as Customer Dissatisfaction, receive a higher score with each additional phrase and phonetic element identified.





Indicator Categories, Descriptions, Sample Phraseology and Use Cases

Here are some examples from the thousands of phrases that go into our search algorithms.

Indicator	Description	Sample Phrases/Use Cases
Call Attribute		
<i>The Call Attribute category examines the specific attributes of the phone call.</i>		
Agitation Level	Call content identifies acoustic signals measuring emotion based on stress detected in the voice-wave.	An elevated level of agitation can indicate excitement, anger or frustration. The system will detect a lower agitation level for a caller that speaks with a slow drawl as opposed to a caller who talks fast and loud. For this reason, agitation is most effective when combined with other indicators. When combined with dissatisfaction indicators, an elevated agitation gives a stronger indication that caller is indeed dissatisfied.
Percent Silence	The absence of speech on a call measured against total duration.	Typical silence on a phone call should not exceed 25-30%. The caller is more apt to show signs of dissatisfaction on calls with a high percent of silence. Percent silence is another indicator that can be very effective when combined with other indicators.
Repeat Contact 72 Hrs	Indications that the caller has called previously within the last 72 hours.	This indicator is based only on calls that were analyzed through conversation analytics. If the phone number was previously identified by the analytics system within 72 hours, the calls will be flagged as a repeat contact.
Voice Message	Call content indicates that the caller left a voice message.	The IVR is recognized on the Agent Channel and is used to help identify if the caller reaches a voice message. Sample Phrases: "Leave a brief message" (Agent) "When finished recording" (Agent) "At the tone" (Agent)
Caller Sentiment		
<i>The Caller Sentiment category analyzes the caller's general attitude during the call.</i>		
Cancellation	Indications that the caller made a request to cancel service.	Sample Phrases: "Cancel my service" (Caller) "Cancel for you" (Agent) "Final bill" (Caller/Agent)
Complaints	Indications that the caller was dissatisfied or unhappy with the agent or with a product or service.	Sample Phrases: "This is ridiculous" (Caller) "Difficult to work with" (Caller) "I totally disagree" (Caller)
Compliments	Phrases or words used that indicate the caller was complimentary of the agent, product or service.	Sample Phrases: "You're amazing" (Caller) "You've been a big help" (Caller) "You're the best" (Caller)
Dissatisfaction (c)	A composite of indicators	Dissatisfaction is a composite indicator that uses both acoustical

whose aggregate data indicates a level of caller distress and dissatisfaction.

measures, such as Agitation and Percent Silence, as well as phrases that indicate negative emotion (Cancellation, Complaints, etc.). Individual indicator strength builds toward the composite indicator strength.

Escalation Requests	Indications that the caller requested to be escalated to supervisor, manager, etc.	Sample Phrases: "Speak to a supervisor" (Caller) "Who is your manager" (Caller) "Talk to owner" (Caller)
Objection Language	Call content indicates that the caller expressed objections to purchasing or setting an appointment.	Sample Phrases: "Talk to my spouse" (Caller) "I'm going to wait" (Caller) "Don't have the money" (Caller)
Politeness	Caller used words or phrases that indicate politeness.	Sample Phrases: "Please" (Caller) "Thank you" (Caller) "My pleasure" (Caller)
Repeat Inquiry	Call content indicates that the caller has called more than once with an inquiry.	This indicator differs from "Repeat Contact" in that it is based on phrases that indicate the customer has called multiple times about the same thing. Sample Phrases: "I keep calling" (Caller) "Person I talked to" (Caller) "I've been calling since" (Caller)
Conversion <i>The Conversion category analyzes if the call resulted in desired outcomes of a lead or a sale.</i>		
All Conversion (c)	A composite indicator with aggregate content indicating that some type of marketing or sales conversion was made during the call.	This is a composite indicator that identifies if an appointment or reservation was made, there was a commitment to buy, the customer requested additional information or payment language was detected. Individual indicator strength builds toward the composite indicator strength.
Appointment Set	The caller or agent used words or phrases that indicate an appointment was set.	Sample Phrases: "Got you scheduled" (Agent) "See you tomorrow at" (Agent) "O'clock work for you" (Agent)
Commitment to Buy	Caller used words or phrases that indicate a commitment to buy.	Sample Phrases: "Fax authorization form" (Caller) "Put it aside for me" (Caller) "Mail check" (Caller)
Initial Purchase	Phrases and words were used that indicate a caller new to the business made a purchase during the call.	Payment language is used as the basis for this Indicator. Calls with existing customer language are filtered out.
Payment Language	Phrases and words were used that indicate a caller made a payment during the call.	Sample Phrases: "Ready for card number" (Agent) "What kind/type of card" (Agent) "It's a Visa" (Caller)

Phone Appointment Set	Indications that a follow-up call was set.	Sample Phrases: "Call a little before" (Agent) "Call around x your time" (Agent) "Give me a call when" (Caller)
Request for Info	Call content indicates that the caller requested additional information be sent to them.	Sample Phrases: "Email me information" (Caller) "Fax me form" (Caller) "Send me brochure" (Caller)
Reservation Made	Phrases and words were used that indicate a caller made a purchase during the call.	Sample Phrases: "Your confirmation number is" (Agent) "Email confirmation" (Agent) "Finalize reservation" (Agent)
Etiquette	<i>The Etiquette category measures if the phone agent demonstrated phone etiquette during the call.</i>	
Agent Empathy	The agent used phrases that indicate a level of empathy.	Sample Phrases: "I understand your situation" (Agent) "Sorry to hear that" (Agent) "Unfortunately not able to" (Agent)
Agent Politeness	The agent used words or phrases that indicate politeness.	Sample Phrases: "My pleasure" (Agent) "May I please" (Agent) "Bear with me" (Agent)
Phone Etiquette (c)	A composite of indicators whose aggregate data indicates a high level of agent phone etiquette and professionalism.	Phone Etiquette is a composite indicator that uses both acoustical measures such as Tempo, Agitation and Percent Silence as well as phrases that are indicative of good phone etiquette (Politeness, Empathy, Polite Hold Protocol, Assuming Ownership, Verbal Clarity, etc.). Individual indicator strength builds toward the composite indicator strength.
Polite Hold Protocol	Call content indicates that the agent used polite hold protocol if a caller was put on hold during the call.	If the analytics system detects that a hold occurred, we then analyze Polite Hold Protocol. If no hold was detected, this indicator returns an N/A. Sample Phrases: "Thank you for holding" (Agent) "Can you please hold" (Agent) "Are you able to hold" (Agent)
Transfer Permission	Call content indicates that the caller was transferred during the call.	Sample Phrases: "Put you through" (Agent) "Go ahead and transfer" (Agent) "Let me transfer you" (Agent)
Lead Quality	<i>The Lead Quality category measures if the attributes of the caller as indicated through words and phrases on the call match key lead criteria.</i>	
Acquired Address	Call content indicates that the Caller provided personally identifiable physical address information.	Sample Phrases: "What's your current address" (Agent) "What's the zip code" (Agent) "My zip is" (Caller)



Acquired Email	Call content indicates that the caller provided an email address.	Sample Phrases: "What's your email" (Agent) "At gmail dot com" (Caller) "Take down email" (Agent)
Acquired Name	Call content indicates that the caller provided their name.	Sample Phrases: "What's your name" (Agent) "My name is" (Caller) "Who am I speaking with" (Agent)
Acquired Phone Number	Call content indicates that the caller provided a phone number.	Sample Phrases: "My phone number is" (Caller) "What's the best contact number" (Agent) "Give you my number" (Caller)
Existing Customer	Call content indicates the caller is an existing customer.	Sample Phrases: "My account" (Caller) "Credit card on file" (Caller/Agent) "Reschedule appointment" (Caller)
Lead Score (c)	A composite of indicators whose aggregate data suggest an overall caller lead score.	Lead Score is a composite indicator that uses both Call Attributes such as Tempo, Repeat Contact and Agitation as well as phrases that are indicative of a high quality lead (Sales Inquiry, Buying Signals, Acquired Personal Info, etc.). Individual indicator strength builds toward the composite indicator strength.
Repeat Sales Inquiry	Call content indicates the caller has called more than one time to inquire about a product or service.	Sample Phrases: Analytics system applies a "Repeat Contact" filter to all calls identified as "Sales Inquiry."
Sales Inquiry	Indicates that the caller made an inquiry about product or service.	Sample Phrases: "How much is" (Caller) "What's the cost" (Caller) "Need to book a room" (Caller)
Sales Performance <i>The Sales Performance category analyzes if the agent is using correct phone skills, techniques and best practices to convert a sale.</i>		
Ask for Business	Indications that the agent asked the caller to purchase.	Sample Phrases: "When would you like to get started" (Agent) "Can you do morning" (Agent) "What time works" (Agent)
Build Credibility	Call content indicates that the agent used phrases to build credibility in the company or agent.	Product features are not included in this query. Custom indicators can be developed to address your specific products. Sample Phrases: "A one BBB Rating" (Agent) "Offer Price Match Guarantee" (Agent) "Leader in the industry" (Agent)
Buyer Confusion	The caller used words or phrases to indicate they are having trouble understanding the agent.	Sample Phrases: "Can you explain that again" (Caller) "Don't know what that means" (Caller) "I'm confused" (Caller)

Determine Needs

Indicates that the agent asked questions to determine the needs of the client.

Sample Phrases:
 "How often" (Agent)
 "What type/kind/model/etc." (Agent)
 "Let me ask you" (Agent)

Missed Opportunity (c)

Call content indicates that the caller requested pricing or information about products or services but no conversion was identified.

The Analytics System looks first to see if the call was a Sales Inquiry, then looks for conversion language. If no conversion language is identified on a call that was flagged as a Sales Inquiry, the system returns a Missed Opportunity flag.

Assuming Ownership

Indications that the agent took ownership for the caller's requests.

Sample Phrases:
 "Let me check for you" (Agent)
 "I can help you with that" (Agent)
 "Let me take care of that" (Agent)

Promotion Mention

Call content indicates the agent made an attempt to upsell or mentioned a promotion.

Sample Phrases:
 "Prepay discount" (Agent)
 "Our holiday special" (Agent)
 "Buy one get one free" (Agent)

Requested Lead Source

Call content indicates that the agent asked how the caller heard about their company or the caller volunteered the information.

Sample Phrases:
 "Your ad in the paper" (Caller)
 "How did you hear about us" (Agent)
 "Did you find us online" (Agent)

Restate

Call content indicates that the agent restated the caller's needs.

Sample Phrases:
 "Just to recap" (Agent)
 "I heard you say" (Agent)
 "If I understand you correctly" (Agent)

Sales Skills (c)

A composite of indicators whose aggregate data indicates a high level of agent sales skills.

Sales Skills is a composite indicator that uses both Call Attributes such as Tempo and Agitation as well as phrases that are indicative of effective sales skills (Assuming Ownership, Building Credibility, Determine Needs, Restate Needs, Ask for the Business, etc.). Individual indicator strength builds toward the composite indicator strength.

Trial Close

Call content indicates that the agent employed a trial close.

Sample Phrases:
 "Is that what you have in mind" (Agent)
 "Are we on the right track" (Agent)
 "Does that sound like what you need" (Agent)

Verbal Clarity

The caller indicates they are having trouble hearing or comprehending the agent. This is an inverse indicator. Each negative phrase found reduces the Verbal Clarity strength indication.

Sample Phrases:
 "Can't hear you" (Caller)
 "Do you speak English" (Caller)
 "You're speaking too fast" (Caller)

