# 2020 CCW Nashville - Tethr

**Tethr** enables organizations to unlock the insights provided in voice interactions as well as those on other channels. While 70% customer communication still take place on the phone, few businesses tap the valuable information contained in these direct interactions to improve customer experience, sales conversions, compliance, or operating margins. Tethr's Conversation Intelligence platform employs AI and machine learning in listening to, accurately transcribing, and analyzing conversations in real-time, giving you searchable, actionable insights. Dean Cruse, VP of Marketing for Tethr and Matt Dixon, Chief Product and Research Officer, gave us a closer look at how it works.

***What are some of the ways Tethr empowers enterprises to better understand their customers?***

Our voice analytics platform enables these companies and their leaders to access the data in conversations, whether phone recordings, chat interactions, case management records from organizations such as Salesforce Service Cloud or Zendesk, SMS exchanges…anywhere where there is dialogue between a company and its customers. Our most compelling use case is to get companies out of the business of sending out post-call surveys. Since our technology can capture the entirety of the conversation with the customer, the algorithms we've developed are capable of effectively predicting scores that a customer might have given, skipping the tedious process of filling out and evaluating a survey.

It's proven quite transformative: businesses get a much bigger sample size, lots of actual feedback, the ability to close the loop with customers, fix problems at scale, and target coaching for agents in ways that were not previously possible.

***How does your solution help companies know what customers are thinking when sometimes even surveys don't ask the right questions?***

Research has been done in providing the 'Effortless Experience' to measure customer effort scores. We've taken it a step further by building an algorithm we call the Tethr Effort Index, which is based on more than 200 separate variables derived from conversations. It runs the gamut from elements such as the duration of the call to silence time, overtalk and more. But it also includes sentiments such as customer frustration and confusion which we're able to pick up via machine learning and AI. It also incorporates both good and bad agent behaviors: positive language, the rep demonstrating advocacy versus hiding behind policy. It also includes things said by customers before the conversation even starts: "your website or app was extremely frustrating and now I have to call," or "the field technician never showed up to fix my problem." The Index picks up product issues and competitive mentions. We built it by taking tens of thousands of completed surveys from a host of companies across a broad spectrum of industries where the customer had given an effort score. We then trained an algorithm to predict what that score might be from raw audio on the back end.

***Does the platform include looking at tone and keywords?***

Speech analytics is a technology that has been around for 15 years or longer and many of the products are based on keyword spotting. This could be a negative word, a competitive name, or product name. But it also could be tone such as audio characteristics such as pitch or inflection, elements that help us determine if customers are amped up, angry or confused. Compared to these keyword spotting tools, Tethr is focused on is the syntax of what is really being said in the conversation. In phone calls, we transcribe the audio and train the machine to spot more than just keywords, but broad concepts. It is much more challenging to have the machine discern when a customer is expressing frustration in order to recognize all the approximately 350 utterances and phrases that constitute the concept of frustration. But, we've conclusively taught the Tethr platform to accurately recognize these concepts so now we can dashboard them and track them and count them as variables in our model. Similarly, advocacy in agent behavior is a complex concept. We've learned the words and phrases that demonstrate that an agent is communicating that he or she is on the customer's side. Along the same lines, Tethr can identify language that indicates when agents are either hiding behind policy or shirking responsibility.

While we do translations into other languages, we are mostly North American-based and the machine is trained in English. However, we can train the machine to spot phenomena such as frustration even when the cultural ways it is expressed are different: we can also train it to spot customized characteristics to meet the needs of specific clients.

***What level of person is required to effectively use your platform within a company?***

It can be administered by someone at a relatively junior level. To effectively use many other platforms on the market, a company would need a data scientist to do the coding. Our "coding" is as simple as thumbs up or thumbs down: sort of like what people do in listening to Pandora.

If someone want to track a problem that is specific within an organization, they come up with a few sample phrases and feed it to the machine which comes back and basically says "how'd I do in identifying this type of behavior?" When it provides examples from different calls, the person who made the request can communicate which ones are relevant and which ones are wrong. When it reaches the point where there are no more mistakes in how the issue is interpreted, the person making the request can simply hit 'publish' and everything is good to go. Appropriate titles to set such parameters can include Quality Assurance Supervisors, Contact Center Managers, Product Specialists, and others. We send them through a training program that takes just hours to teach them how to do this on their own and they are excited to be able to control AI and machine learning. We find that is more important that the people know the company's business problems and how they are articulated by customers as opposed to technical knowledge. When businesses delegate the task of creating a machine learning category to a data science team, they can get the procedures wrong because they don't understand the problems.

***When the company has the data available, what do they do with it?***

In cases where businesses can use the Tethr Effort Index, for example, they can use the score assigned to each individual interaction. As someone said to me at the most recent Las Vegas CCW, 'Now I don't have to worry about sample size or whether a survey was only filled out by angry customers. How do I use the information?' I laid out three different use cases. In our experience, about 15% of calls are going to be in the highly negative range where a lot of effort was required. In those difficult situations, the customer is more likely to churn out and less likely to make any further purchases, often becoming a detractor on social media. So, if a company knew who that 15% were, it presents a powerful opportunity to close the loop with them. This does not necessarily mean making special offers but simply acknowledging that the company has not lived up to expectations and then ask the customer how it can do better.

The second use case is using the Tethr Effort Index as a replacement for someone sitting with headphones evaluating calls in the traditional QA process. A business can be aware where both good and bad calls are happening, tracked by call reason and agent or by team and supervisor. Management can go deeper in finding out which reps are responsible for increasing effort by the customer and delivering more impactful coaching to modify these behaviors. The final one would be spotting issues that cannot be fixed in the contact center such as product deficiencies or website problems. Once these insights are uncovered, the company can work to fix these issues to prevent the flow of calls concerning them.

***You mentioned coaching. Does your platform enable companies to be more objective than subjective in their approach?***

One of the biggest problems of QA is that it always has been a manual labor-intensive process that consumes a lot of time and can be quite costly. This has led to companies sampling no more than 1% of call volume, if that much. In addition, in many environments, the QA process runs side-by-side with an appeal process where reps can complain that they are graded only on their worst calls. This means more manual labor and becomes very cumbersome. More to the point, QA doesn't always work the way it is intended to which is of course improving quality. It often becomes a compliance-oriented, check-the-box activity. We have found that it is a lot more fair, objective and effective when a machine does the listening as opposed to a person. It globally addresses identifying the reps who don't know how to deal with specific product issues or are hiding behind 'powerless-to-help' rhetoric which allows the company to address the important work of helping them perform better. One insurance firm we worked in was able to redeploy the 100+ people they had doing QA to coaching,

***Do companies keep their data proprietary, or can it be shared in some fashion?***

We have numerous clients who each have practitioners creating their own machine learning categories and teaching the platform to do new tricks. While we respect that many companies want their data to be private, we can in some instances use leverage the code some clients have developed to establish best practices, standardize it and share it across the breadth of our customer base. It's almost like crowdsourcing machine learning.