



Deliver Amazing Customer Experiences

Leveraging AI-Powered Speech Analytics

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FEATURING THE INSIGHTS FROM



Matt Rocco
President/CEO

Matt is a 34-year veteran of the call center /BPO industry. He has held key leadership positions within Dun & Bradstreet, The Berry Company (a subsidiary of Bell South), Etech, Inc. and Etech Global Services. In the past 34 years, he has spent time in every facet of call center operations and outsourcing processes. Matt is committed to sharing his experiences and helping others. From its humble beginnings in Nacogdoches, Texas Etech has grown to over 3,000 employees that provides world-class solutions to Fortune 500 companies from its locations in the US, India, and Jamaica. Matt has been President and CEO of Etech since 2013.



Jim Iyob
Chief Customer Officer

Jim is a 33-year veteran of the call center/BPO industry. His responsibilities for Etech include strategy, marketing, business development, IT, program implementation, operational excellence, and product development across all Etech's existing lines of business - Etech, Etech Insights, Etech Technology Solutions (ETS), and Etech Social Media Solutions. He is passionate, driven, and an energetic business leader with a strong desire to remain ahead of the curve in outsourcing solutions and service delivery. Jim has an impeccable track record of innovation and advanced business intelligence. He has been instrumental in setting up services for customers needing quick solutions for their daily customer experience needs. This has helped him develop, implement, and retain some of the most successful, award-winning programs that deliver consistent ROI.

EXECUTIVE SUMMARY

Speech Analytics for Voice of Customer Insights

Speech Analytics is revolutionizing the contact center industry with detailed insights and analytics for determining the Voice of Customer, process friction points, and other powerful intel that is “beyond the checkbox”. Empowering organizations to determine customer sentiments, AI-Powered Speech Analytics supports making well-informed data-driven decisions.

With the ability of real-time monitoring 100% of customer interactions, regardless of the communication platform, organizations now have complete visibility into agent and customer behavior that helps in improving:

- ✔ Customer Acquisition
- ✔ Customer Retention
- ✔ Customer Service Experience
- ✔ Brand Power
- ✔ Agent Experience

Adopting speech analytics technology leads to reduced operational costs, improvement in the bottom line and most importantly, improved agent and customer experiences.



Companies without advanced analytics are leaving significant customer-service improvements on the table. Only 37 percent of organizations feel that they are using advanced analytics to create value; this finding reveals significant missed opportunity.

- How advanced analytics can help contact centers put the customer first, McKinsey



SPEECH ANALYTICS AT YOUR CONTACT CENTER

Generating CX Insights

Voice of Customer Analytics

Customer conversations are filled with data often overlooked without the partnership between experience management and technology. Using spoken VOC data, organizations can identify agent or script effectiveness by analyzing the interaction and responses. Through these insights, change can flow throughout an organization, from agent coaching to product improvement to marketing opportunities. This combination is a powerful approach to overall performance enhancement in your industry.

Customer Sentiment & Emotional Intelligence Analysis

Customers share a lot of information and actionable insights during their interactions with your company. The application of speech analytics technology uncovers the key drivers impacting customer experience utilizing universally recognized best in class CEB standards. Our AI based solutions are trained to “wear the customer hat” rather than analyze from the market point of view, therefore output is customer centric and focused on the effortless experiences.

Customer Experience Analytics

Will you please stay on the line to complete a brief survey? No need to waste your customers time and effort with surveys that primarily capture high emotion moments. Leveraging CX analytics can help organizations avoid depending on customer surveys or reviews for measuring customer satisfaction. The analytics engines can measure what is being said, when it is being said, and other conversational nuances, giving access to data across all conversations - positive, neutral and negative - which makes the insights more accurate and actionable.

Improving performance at every level of organization

Speech Analytics impacts many aspects of contact center operations including the roles and responsibilities of the CX Professionals. Here is the overview of Speech Analytics' impact on different contact center roles.

Senior Leaders

With speech analytics, senior leaders can generate a higher return on investment by leveraging actionable insights for well-informed decisions. Using speech analytics technology leads to:

- ✓ Increased ROI
- ✓ Strategic decisions backed by real-time data
- ✓ Real-time monitoring of key behavior trends
- ✓ Market insights
- ✓ One solution for managing contact center performance
- ✓ Transparency in process across different levels of organization

Account Leaders

Speech Analytics helps Account Leaders in improving their department's operational performance and can help to reinvigorate stagnant operations through an emphasis on improved performance.

- ✓ Performance management
- ✓ Process optimization
- ✓ Actionable business insights
- ✓ Enhanced Customer Experience
- ✓ Reduced handling time
- ✓ Competitor Analysis

Team Leaders and Coaches

In a contact center environment, speech analytics empowers team leaders to conduct precision-based coaching. It also provides overall view of performance of individual team members, as well as of entire team as a whole.

- ✓ First-Call Resolution
- ✓ Transfer Analysis
- ✓ Up Sell & Cross Sell Analysis
- ✓ Tenure Analysis
- ✓ Training Gap Analysis
- ✓ Churn Signals
- ✓ Live Compliance and Critical Behavior Monitoring
- ✓ Customer Sentiment Analysis

Agents

Speech Analytics can empower agents to manage their own performance and imbibe best practices of top performers. It further provides detailed actionable insights for agent coaching and performance tracking.

- ✓ Reduced agent effort
- ✓ Real-time coaching
- ✓ Empowerment
- ✓ Targeted agent coaching

FREQUENTLY ASKED QUESTIONS WHEN TRANSITIONING TO SPEECH

How to implement Speech Analytics solution?

Implementing a speech analytics solution requires effective planning, a defined goal and collaborative efforts of different cross functional teams. The best approach should be to start small, in a specific department for efficient change management.

How to measure results and outcomes of transition to Speech Analytics?

Aligning the cross-functional teams is an important part to get the maximum outcome of process disruption. Share the reports demonstrating the benefits derived out of transition to speech analytics with your team members.

The findings and breakthrough results will engage your teammates with the initiative. Based on the findings, get feedback from your team members and resolve their concerns. Effective communication is the KEY in change management.

Some insights not only open doors for customer feedback but also identifies employee challenges which were still undiscovered. The next approach should be to have regular interactions across departments for demonstrating data, KPIs and goals.

Keep everyone informed on how the transition to speech analytics is optimizing the existing process and making their work easier. This will further lead to maximum participation in your speech analytics transition.

Can speech analytics help contact centers who do not use a scripted call flow?

Although a pre-defined script will always be easy to code; Machines can also be trained to identify unscripted language. Based on industry and product, agent dialogue will always follow a pattern that our Data scientists are able to decipher and train the machine to recognize.

Is speech analytics just for calls?

Speech can help you map your customers journey throughout your customer touchpoints. It is a good strategy to use speech analytics as an omnichannel solution to mine your interactions to ensure you are seeing the full picture.

What is a true indicator of an issue vs. white noise?

With Big data, you will always find patterns. However, viable patterns will not be seasonal in nature or only visible in a small portion of the data set.

To effectively utilize Speech technology, your team should be able to distinguish between a random occurrence and a pattern by assessing the population its impacting, and factor those co-occurrences in our decision making if the affect size is larger than 5%.

Data confidence – what does 85% accuracy really mean?

Accuracy can be misleading. Just classifying transcript accuracy does not mean the data you will be getting from the model will adapt the same accuracy.

When you train a speech engine to data mine your interactions you also want to look at the correct future recognition vs. incorrect future recognition.

Our Etech Insights team measures this by calculating the accuracy rate, which is,

$$\text{True Positives} + \text{True Negatives} / \text{Sum of values returned.}$$

For any classification model to be used in production environment, the accuracy should be 85% or above. Which signifies that regardless of the transcription errors, 85% of the results being returned are accurate.

What are the Transcript Errors?

The transcription quality is measured in Word Error Rate (WER). The accuracy of STT solutions typically ranges from 75% to 90% depending on the quality of the source audio.

Word Error Rate (WER) is the strictest measure of recognition quality. While calculating the total number of errors (which includes insertions, deletions, and substitutions), divides that by the number of words in the reference transcript, and multiplies the result by 100. The result is the rate of erroneous recognitions. The lower the rate, the better.

$$ACC = 1 - \frac{S+I}{N-D+1}$$

Accuracy (ACC) is a term used by most speech-to-text companies. The higher the ACC the better is the result.

- S = number of substitution errors
- I = number of insertion errors
- D = number of deletion errors
- N = number of words in the reference transcript

Accuracy is impacted by the use of lossy compression algorithms, noise (such as static or chatter), and distortions resulting from low-quality microphones. Recording source audio in a low compression encoding, such as G.711 or PCM, also increases accuracy. Unlike data in a zip file, when audio is compressed, some of the original audio data is discarded permanently. This is the case whenever audio is encoded using a lower quality audio method such as G.729A/B, GSM 6.10, or MP3.

What are the Audio Channels?

Mono Channel: Contact centers record in mono channel to save space which means they are compressing the audio to the lowest possible amount of space needed which obviously impacts quality.

Stereo channel with compressed codec will suffer from same issue. Poor quality source audio impacts word error rate (WER) like Mono Quality calls or background noise TVs, radio/music, traffic noise, etc.

Transcription errors will always be there due to the sampling loss in audio no matter which provider you use. It is about smartly circumventing it by incorporating those prevalent error patterns in your coding and teaching the engine to recognize them as intended.

Even at as low as 75% accuracy you will still get a data set which is much larger than what a traditional QA will monitor manually. You are looking at a much larger portion of your data set and making decisions that are statistically Viable as opposed to a QA who can listen to 40 or so calls a week.

What Metadata Can You Use to Enhance the Solution?

Metadata is the information that describes and summarizes a simple set of data. It is a critical part of your speech analytics initiative as it simplifies tracking or working on the data.

Although speech analytics works well by itself, the results could be further improved in combination with another set of data.

Learn how the prospective solution integrates data for delivering insights. Besides that, chart out the path how to get these insights through the most important component, i.e., the Human intelligence that makes the real difference.

Whenever you start working on the metadata, first bring all the data you have on the table and then work with team to identify the most suitable data.

LIFE CYCLE OF INTERACTION ANALYSIS USING SPEECH

Identify and establish business goals

During this phase, our team will work with you to identify and establish business goals, prioritize them based on the need, impact, and ROI.



Gather required data

Once we have the goals established, we will work with you to identify what type of data we will require to build a solution.



Modelling

Our data engineers will train the engine on the data type of events/behaviors we are looking to recognize.



Data analysis

Now that we have the data required, we will clean, structure, and analyze the data to identify actionable insights into emerging patterns and the root cause of both successes and failures.



Monitor

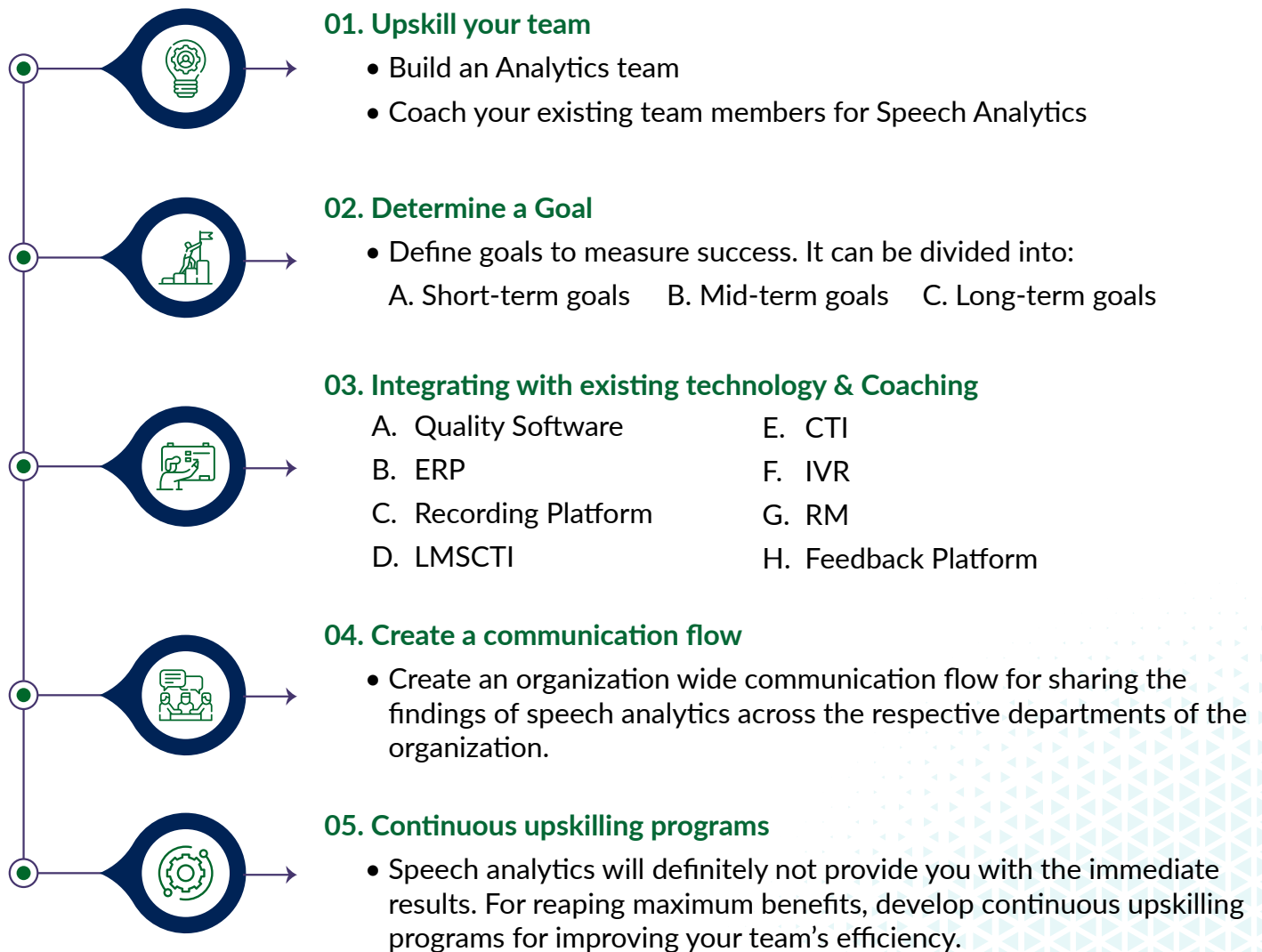
We will continuously monitor the models established to identify gaps, change in trend/pattern, and adapt to ensure accuracy and real-world implementation.



CONCLUSION

Speech analytics technology identifies opportunities for optimizing the internal processes and improving the bottom line for an organization. By appropriately utilizing the insights generated through a speech analytics solution, organizations can drive change by optimizing time spent on manual activities, staying ahead of compliance violations, transparency in the existing processes and continuously improving CX.

Driving a new solution in an organization takes time, patience and a good deal of coordination. So chart out a plan, edit the plan based on your findings, choose the best technology partner and align your internal stakeholders.



ABOUT ETECH

Etech Global Services is a servant leader organization committed to making a remarkable difference for each other, our customers, and within our communities. Etech offers a variety of services that includes inbound and outbound customer care, quality monitoring and analytics, email, live chat, technical support, back-office support, and software development.

Etech Insights is an innovative one-of-a-kind solution for call center quality monitoring with its approach to total quality management. With AI-powered speech analytics, Etech Insights provide valuable performance insights that help interpret emotional cues for improved call center quality monitoring and effective agent coaching. Leveraging our strategic blend of quality experts, best in industry process, and speech analytics technology, we provide a quality experience to support all facets of business.



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