



**The Future of Contact Centers**  
**Leveraging People, Processes &**  
**Artificial Intelligence**

**Matt Rocco & Jim Iyob**

# The Future of Contact Centers

*Leveraging People,  
Processes & Artificial  
Intelligence*

# Matt Rocco



Matt Rocco is the President for Etech Global Services. He also serves as President & COO of PRWTech, LLC.

Matt is a 32 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. Matt has spoken at many industry events and has been featured in articles in numerous periodicals including CIO Review, Call Center Magazine, Call Center Times, Connections Magazines and others.

Matt started as a telephone rep for D&B in 1984 and now serves as President of Etech Global Services. In the past 31 years, he has spent time in every facet of call center operations and outsourcing processes.

Since 2003, he has been the President of Etech's operating companies, a multi-national outsourcing organization with over 2,700 employees that provides world class solutions to Fortune 500 companies from its locations in the US, India and Jamaica. Under Matt's leadership, Etech has received numerous industry and community awards including: 20 Most Promising Quality Monitoring Solutions Provider – CIO Review, Professional Association of Customer Engagement (PACE) – Technovation Award, PACE – Corporate Citizen

Award (4 times), GESIA – Best Call Center / BPO Award, Top 50 Minority Owned Businesses – Diversity.com, US Chamber of Commerce – Corporate Citizenship Award and many others.

Matt is an alumnus of Dickinson College in Carlisle, PA where he lettered in both basketball and baseball serving as captain of the basketball team his senior year. He graduated from Dickinson with a BA in Economics. He has also completed the Master Certificate program in Executive Leadership from Cornell University.

In addition to his responsibility at Etech, Matt has served on the board of the Nacogdoches County Chamber of Commerce, the United Way of Nacogdoches County, the Nacogdoches Dragon Athletic Booster Club, Melita International User Group, License Plates of Texas, LLC., PRWTech, LLC, the Pineywoods Youth Football Association and the Glory Gang Ministry, a Christian service organization that is dedicated to assisting and teaching disadvantaged youth.

In May of 2010, Matt was elected by the citizens of Nacogdoches, TX to serve on the Nacogdoches Independent School District Board of Trustees. During his 3 year term, Matt served as president and vice-president for the Board of Trustees.

Matt is married to his college sweetheart, April. They have raised five children - Nick, Matthew, Jermaine, Jamaal and Lexie.

Email: [Matt.Rocco@etechgs.com](mailto:Matt.Rocco@etechgs.com)

# Jim Iyooob



Jim is the Chief Customer Officer for Etech Global Services. Jim has responsibility for Etech's strategy, marketing, business development, IT, program implementation, operational excellence and product development across all of

Etech's existing lines of business – Etech, Etech Monitoring Solutions (EMS), 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 25+ years of contact center outsourcing experience in inbound, outbound, chat operations, and social media management spanning across the globe; domestic, nearshore, and offshore. His expertise includes operational performance management, e-commerce sales and service with an impeccable track record of innovation and advanced business intelligence. One of his strongest suits is being able to assist customers in launching and developing their live chat operations into a world-class customer experience solution.

Jim has an exceptional understanding of the customers' products, their requirements & processes, and a complete analysis in order to provide the right kind of solution. This has helped him develop, implement, and retain some of the most successful, award winning outsourcing solutions that deliver consistent ROI. Due to his level of expertise, Jim has been featured in numerous publications including CIO Review, Contact Center Pipeline, Connections Magazine, and was also listed as one of the 'Top 20 Influential People to Follow' on Twitter by "Iwantitnow".

The gained experience over the past 25+ years has enabled him to be a subject matter expert for call center solutions.

In addition to his responsibility at Etech, Jim likes to spend his spare time volunteering for various charitable organizations including the Nacogdoches County Chamber of Commerce, the United Way of Nacogdoches County, Boys and Girls Club of East Texas, and the Glory Gang Ministry, a Christian service organization that is dedicated to assisting and teaching disadvantaged youth.

Jim is married to his darling wife, Kelci. They have raised three children – Michael, Brianna, and Kylee.

Email: [Jim.Iyoob@etechgs.com](mailto:Jim.Iyoob@etechgs.com)

Foreword, Mike Mings Co-Founder, Tethr

Speech analytics solutions must move beyond legacy simple transcript search and sentiment. The next generation call center will leverage AI to map word and concept level relationships within human conversation and then leverage these insights to produce business relevant intelligence or insights. Further, these models must be fluidity dynamic to evolve or continuously learn. This is where machine learning contributes to an evolving customer specific domain of intelligence. The resulting semantic intelligence and based on deep learning will produce continuously improving predictions. At Tethr, we see current industry solutions lacking a sufficient level of intelligence depth. Currently industry solutions simply produce superficial reporting based on statistical analysis. Customers are asking for and need better understanding that can be applied to improve their business. The industry will not only simply detect information, but what we are saying what it means to your business. The market is telling us that traditional speech analytics and sentiment value is not realized in business metrics and performance. Because of a lack of market and product maturity, traditional speech analytics tools tell customers a lot about single words, but the organization loses contextual understanding when a tool focuses on single words. The conversation has to be at a point of contextual understanding and assisting the leadership and management team of call centers with a means of predicting and assisting them with helping understand how the customer experience impacts financial outcomes. Then tailor

an engine to find the right context that matters to an organization. When this happens, you can impact sales conversion, churn, call volumes, compliance, QA. AI in the contact center must move beyond traditional legacy solutions. Beyond sentiment. Users need the ability to map relationships used in human language to predict outcomes based on those relationships.

# Table of Contents

1. Artificial Intelligence Trends You Need to Know
2. Artificial Intelligence's Impact on the Contact Center Industry
3. How Artificial Intelligence Can Improve Call Center Performance
4. How Contact Centers Can Put Artificial Intelligence to Work for Them
5. Speech Analytics — An Emerging Player in the Contact Center Industry
6. The Artificial Intelligence – Customer Experience Relationship
7. Listening to Every Customer With the Help of Artificial Intelligence
8. Artificial Intelligence as a Driver of Better Business Decisions
9. Flexibility and Analytics — Your Keys to Customer Engagement
10. Transforming Your Quality Analysts Into Business Analysts
11. Better KPIs Through Combining People and AI
12. The Noble Blessings of Contact Center Evolution

13. Why Technology is Nothing Without People...and Neither Is Your Business
14. Embracing Technological Development
15. Your Future Growth is Technology-Driven and Human-Centered
16. An Important Reminder: Artificial Intelligence Should Enhance, Never Supplant
17. Why Artificial Intelligence is Your Gateway to Success

# 1.

## Artificial Intelligence Trends You Need to Know

Today's consumers want more than good products and good prices. They want good service and an effortless experience as well. In fact, they demand it. They want it fast, they want it good and they want it their way. Part of the challenge for contact centers is that "their way" varies from customer to customer. While one person's way is via phone, another's is via an app and yet another's is via social media. To be successful in today's environment, you've got to be everywhere all the time.

What happens if your company isn't everywhere all the time? Your customers will leave you. And, as if that's not bad enough, you can expect up to 95% of them to tell their friends, family and coworkers about their bad experience. Believe it or not, that is exactly what is happening in American commerce today. How much of an impact can this have? \$41 billion.

That's how much sub-par service is said to be costing U.S. businesses every year. <sup>1</sup>

But, before you rush out to get expand your contact center's voice capabilities to every channel such as social media or email stop! You've got to approach this strategically and with an awareness of the technology you can use—and how and why to use it. In this e-book, we'll examine several topics around how you can put artificial intelligence to use in your contact center.

Four key trends guiding our discussion involve:

- The rise of the cloud contact center.
- Machine learning and data mining.
- Cross-functional responsibility for outstanding customer experiences.

### ***The Rise of the Cloud Contact Center***

The cloud is no longer only an option if you want to effectively compete on customer experience. It is at the heart and soul of the new standard. Only cloud-based systems give you the bandwidth and flexibility you need to power systems that can truly wow your customers.

A move to the cloud may well necessitate a retooling of your existing infrastructure, but when compared to the potential for 95% of dissatisfied customers speaking poorly of you to others, the decision should be clear.

Through the cloud, you can deliver the omnichannel experience your customers want, need and deserve. It is also through the cloud that you can obtain massive amounts of high-quality data that can direct your operations. In fact, it is this data that can change your customer experience strategy from reactive to proactive.

### ***Machine Learning and Data Mining***

As a form of cognitive technology, machine learning takes artificial intelligence to a whole new level. Machine learning has always been a significant component of AI and is a subfield; allows a computer to mine large quantities of data and find the golden nuggets you need to increase call center productivity and effectiveness, decrease customer effort, reduce channel switching and improve processes. It can classify, predict and personalize the customer experience and make it more intuitive. It can also help directly with identifying issues and the most effective solutions. AI's role in finding real solutions to customer problems or identifying sales opportunities is more substantial than simply personalizing the customer experience.

### ***Cross-functional Responsibility for Outstanding Customer Experiences***

Call centers no longer shoulder 100% of the burden for making customers happy. This responsibility is a shared one across all departments in an organization. But, in order for other groups to participate in this,

they need access to information. Once again, the cloud will be instrumental here as it is the gateway via which contact center software can be connected to CRM and ERP tools, for example. Some software that provides access for all departments is even available today. Marketing, technology and more can share knowledge and make business decisions using the same information.

Armed with contact center data, management and executive leadership can make decisions about product development and marketing messaging that proactively address the customer experience. Suddenly, the customer experience is an ongoing cycle that starts even before a product is developed and continues all the way through to its use by the customer.

## 2.

# Artificial Intelligence's Impact on the Contact Center Industry

There is no doubt that artificial intelligence has had and will continue to have a dramatic impact on the contact center industry. Automation of routine tasks, enhanced service delivery, targeted marketing and improved rep responses are just some of the benefits our industry has enjoyed, thanks to artificial intelligence.

### *Automation of Routine Tasks*

By automating routine tasks, reps are freed up for other, more valuable work. A great example of this can be seen in the banking industry. Very few people today actually go to a bank to deposit a check or transfer money between accounts. These types of things can be much more easily done via a mobile banking app. Bank employees can then be more

available for customers who have greater needs that may result in more business for the bank. The customer enjoys the expediency and convenience of not having to fit in a trip to the bank and a wait in line.

When those in-person interactions do take place, AI allows them to be supported by much smarter information that helps reps better satisfy—and even exceed—customer expectations.

### ***Enhanced Joined-up Service Delivery***

Providing a fully functional omnichannel platform via which customers are served is no easy task. But, thanks to artificial intelligence, it is possible. This approach can transform the customer experience and our industry by allowing customers the option to interact in the ways that they want to, not the ways we tell them they have to.

It can be easy to get caught up in all that technology allows us to do and put us on the treadmill to make customers keep up with us. But, it is important that we use technology to serve customers, not force customers to use technology to serve us.

For this reason, it is essential that we offer interaction options for people who may be less comfortable with “talking” to us via social media or even a chat feature. Older consumers especially may wish or even need to have the ability to talk with a live person on the phone. Even a younger person with a disability

may have this type of need. Once again, it is the customer that dictates the omnichannel experience.

### ***Targeted Marketing***

Knowing our audiences allows us to effectively target not only our presales marketing but also our contact center marketing and delivery. AI is your gateway to better understanding your customers — and then taking what you know and applying it to meet their needs. Big data information like browsing history or location can let you personalize more of your customers' experiences than ever before.

### ***Improved Real-time Responses***

The concept of skills-based routing is a good one, and today's AI can amplify your ability to put this into practice. Many times, the customer will not even know that a computer is behind the scenes architecting their interaction with you—and that's okay. In fact, it is almost preferable. The more seamlessly you weave technology into your contact center delivery, the better. Your customers should focus on their experience, not the technology. It's up to you to use technology to make that experience a good one. The goal should be to provide the greatest benefit to the customer with the least amount of effort. Different channels for customer contact should facilitate customer interactions rather than asking the customer to adapt to reduce the contact center agent's efforts.

# 3.

## How Artificial Intelligence Can Improve Call Center Performance

Some of the biggest drivers of artificial intelligence that call centers can benefit from are speech analysis, predictive analytics and optimization of current contact center approach.

### *Speech Analysis and Natural Language Processing*

Today's software has the ability to listen to calls and deduce what a customer needs. Voice analytics systems are smart enough to differentiate between the customer and the rep so as to provide accurate information to the company and integrate into your CRM tool.

Most of us have probably been in phone trees where we had to say key words to get to the right person or place. Now, however, solutions enable us to say whole sentences, not just specific words like "rep" or

“billing”. We can say “I need help understanding my bill” and the system will understand us. This can be a huge assist to traditional skill-based routing techniques.

### ***Predictive Analytics***

In addition to voice data, predictive analytics takes other information known about a customer to identify those people who are most receptive to conversion. That conversion can take many forms—a sale, payment of a debt or some other desired outcome. Even better, identifying these patterns that may take a human being weeks if not months to complete can be done in a matter of hours by the right software.

Predictive analytics is an important aspect of AI in the contact center space, but it is less about identifying patterns in the interactions of a single customer and more about identifying recurring patterns across customers. If calls regarding a specific product are resolved in a similar way 90% of the time, it is not necessary to know a lot about the current customer, if they have the same interest or reason for calling, you already know with 90% confidence what the resolution is going to be. This is the whole point of “predictive” it allows agents to predict a customer’s needs without knowing a lot about a given customer.

### ***Optimization of Current Contact Center Approach***

Between voice analysis and predictive modeling, contact centers can learn much about their customers in order to serve them better going forward. However, the benefits do not stop there; it can be used for customer effort analysis (CEB), risk management and post call automation. Because information is also gathered about the reps, these technologies offer tremendous potential when it comes to rep feedback and training. Some companies are even using it to help recruit top reps based upon specific needs.

# 4.

## How Contact Centers Can Put Artificial Intelligence to Work for Them

When learning about the various capabilities of artificial intelligence, it can be hard to know where to start in putting it to use. Perhaps one of the most important points to remember when deciding how to implement an AI solution for your contact center is that it can do many things but cannot do everything.

Computers are smart and can even be programmed to be emotionally intelligent but should not be looked upon as complete replacements for your human reps. Using technology for the right tasks—like identifying customer preferences, alerting when there is a need for a supervisor on a call or even automating outreach—is essential in order to get maximum value out of AI in a contact center.

A few specific areas where artificial intelligence can benefit contact centers are for response knowledge recommendations, running AI algorithms against the right data sets, and improving rep performance and customer satisfaction with predictive analytics.

### ***Response Knowledge Recommendations***

By leveraging voice analysis and natural language processing, artificial intelligence can guide reps as to what they should do, say or ask when interacting with a customer. For example, if a caller to an insurance company mentions that she recently got divorced, the system could display prompts to the rep that relate to the keyword “divorce.” The rep may be prompted to ask the customer if she would like to update her address, name or even beneficiaries. This can be especially helpful to new reps, allowing for reduced training time and a better learning curve, allowing new reps to reach the performance of your tenured team much sooner.

### ***Machine learning leading to AI***

Dark data (voice) converted to normalized data and then processed with a Machine Learning engine to produce BI.

When looking to make the most out of artificial intelligence, the “garbage in-garbage out” philosophy should be considered. What we mean is that choosing what data sets to use for building algorithms matters—a lot. One of the most common

problems companies make is choosing mass quantities of data as the primary selection criteria for building algorithms. Instead, the quality of the data should take precedence here. It is equally important for whole solutions to be properly broken down into individual tasks requiring processing before the rational algorithm is designed. AI systems can do many things, but those things are ultimately done based upon the instructions given to them, so starting with good set of initial instructions and building from there is a must.

### ***Improving Rep Performance and Customer Satisfaction With Predictive Analytics***

Preventing problems before they occur is always an optimal route to good outcomes. When looking at the performance of contact center reps and the satisfaction of customers, predictive analytics can be a company's best friend. Artificial intelligence excels with this type of non-customer-facing analytical need. Reviewing everything from keywords in different channels to voice pitch from calls, the ability of reps to effectively address customer needs can be accurately assessed. Training can be developed based upon this information that proactively arms reps with the right things to do or say so they are not just solving customer problems but delighting them in the process.

When you employ AI to understand customer interactions, you enable your teams to provide top-notch service and manage any issues that arise with

surgical precision. This not only helps the customers, but also helps in coaching and training the reps to exhibit the behaviors you expect and provide customized services based on customer preference. Most importantly role of AI is identifying the most common customer issues and the most effective solutions to those issues. Or, in the case of sales, identifying what most customers are looking for and what the most effective sales pitches are.

### ***The Need for a Quality Monitoring System***

If asked right now how well your contact center is performing currently, what would you say? If your answer would be any form of “I don’t know,” you’re not alone. If your answer is a resounding “fabulous,” how can you prove that assertion? If you can’t, you’re also not alone.

Relying on hunches or anecdotal data to gauge the effectiveness of your contact center opens your business up for potentially serious problems down the road. These problems can quickly extend far beyond an individual customer’s experience and move into the realm of reputation management. All that needs to happen is for one disgruntled customer to get onto social media to vent and, well, the reputation slander snowball begins.

Did you know that it takes 12 positive customer experiences to negate one negative customer experience? That is why it is so important that every interaction with a customer be of the highest quality!

Many things work together to make up the overall quality of a customer experience. At a minimum, these include:

- The politeness and professionalism of the rep.
- The resolution achieved.
- The time required to reach a resolution (including time waiting for a call to be answered as well as time required to complete a call).
- The simplicity of getting help.

When even just one of these things does not meet a customer's expectations, you could be in trouble. This trouble does not always mean your staff did something wrong, either. It may mean that something in your process or system isn't working well. You won't know where the problem lies or even know that you have a problem unless you have an effective quality monitoring system in place.

Understanding clearly the experiences that your customers have when engaging with your contact center is essential. These experiences can directly play into the marketing and branding efforts of your business.

Your contact center does more than simply funnel calls and process tasks. Consider the following results that a high performing contact center can achieve or contribute to:

- Improved customer satisfaction and retention.
- Cost savings from more efficient call handling.
- Increased number of cross-sells and upsells.
- Reduced employee turnover due to improved training and overall job satisfaction.
- Better adherence to company policies.

Quality assurance programs for contact centers directly impact your ultimate bottom line. Equip your staff with the tools and support they need and they will be happier and more productive. And, having happier employees generally translates into having happier customers.

### ***Developing a Customer Driven Monitoring System***

Before going any further with a contact center quality monitoring system, a discussion about the importance of your customers and their experiences is warranted. Certainly you want to reap some business benefits from your monitoring program, but those benefits, quite frankly, should be secondary to improving the overall customer experience. In fact, it could be said that any business benefits should really and simply be natural by-products of an improved customer experience.

When not at work, you yourself are a consumer. Think about your experiences as such. What matters to you? Chances are, what matters to you as a customer matters to your customers as well. Your

quality monitoring system could be thought of like a solar system with your customers in the middle as the sun and everything your business does revolving around them. The number one reason to monitor and improve your contact center experiences is for the benefit of your customers.

Consider these statistics:

- 70% of consumer buying experiences are influenced by the customers' perceptions of how they are being treated by companies according to McKinsey.
- In 2010, 36% of companies consciously competed based upon customer experience. The 2015 Gartner Marketing Spending Survey indicated that by 2016, that number will rise to 89%.
- Forrester Research reported that a price based value proposition is today far less impactful today than a positive customer experience.

If all of the above is not enough, Accenture explains that a poor customer experience is far and away the #1 reason that makes customers change companies today. The ease of shopping online makes finding a particular product or price from another company easier than ever. The only real way for companies to differentiate themselves, then, becomes customer experience.

So, how do you make sure that your quality monitoring system is centered around your

customers? You must make sure that your questions on evaluation forms focus on the areas that most directly impact the customer experience. At a minimum, you must track the following:

- Hold time by channel.
- Abandonment rates by channel.
- Number of interactions to resolution.
- Speed to resolution.
- Total volume of interactions by channel.

In addition to these very objective measures, questions that point to any potential extraordinary nature of an interaction should be included. The goal of every customer interaction should always be to create a “WOW” experience. Your monitoring program should determine whether or not this is being done.

# 5.

## Speech Analytics – An Emerging Player in the Contact Center Industry

While an omnichannel approach to customer service is important, the reality is that the vast majority of American consumers—90% of them in fact—still prefer the telephone as their mode of resolving support issues.<sup>1</sup> This makes speech analytics perhaps one of the most essential forms of artificial intelligence that any contact center could employ.

Armed with the information available from speech analytics, you can improve the customer experience, monitor contact center quality, reduce operational costs and gain key business insights.

### *Continually Improve Your Customer Experience Strategy*

With the rapid advance of modern technology, it seems that nothing in our world stays the same for

long. That certainly is the case for your customer experience strategy, which should be regularly evolving to best meet the needs of your customers. By using today's data, you can better inform tomorrow's business decisions and set yourself up for success. More importantly, you can set your customers up for delighted experiences because their needs were put first.

### ***Improve the Customer Experience***

Speech analytics can tell you everything from the reason a person called to what their emotional state was at any stage throughout the call. By understanding a person's needs and wants, you are better poised to meet customer expectations—and to have a happy customer. AI can not only tell you what the customer's emotional state was during the course of a call, (which is found to be almost useless,) AI can tell you how likely they are to buy, how much effort they are experiencing, and a variety of other specific and important metrics

### ***Monitor Contact Center Quality***

Speech analytics programs do not only track customer voices but rep voices as well. This holistic approach to data gives you a window into the quality of your reps' work. From customer satisfaction to regulatory compliance, you can stay on top of how well your contact center is meeting its objectives.

### ***Reduce Operational Costs***

By learning more about what customers need, you can put things into place that may even pre-empt the need for some calls to your center. This keeps reps freed up for more essential calls. You can also learn what things your reps may need in order to more effectively serve those customers who do call in. The more efficiently service can be deployed, the happier your customers will be and the more customers your reps can serve.

### ***Gain Key Business Insights***

By sharing information from your speech analytics with other departments in your organization, you can use the data to make important decisions about product roadmap and development, marketing and more. Your reps may also be able to learn how to better identify cross-sell and upsell opportunities.

# 6.

## The Artificial Intelligence – Customer Experience Relationship

Make no bones about it—artificial intelligence is intimately linked to customer experience. To deliver the best customer experience possible from beginning to end in today’s world, you should employ some form of artificial intelligence. Your competitors are doing so and therefore your lack of integration will quickly become obvious to your customers and impact your results.

You should look to AI to help you deliver information to the customer, obtain speech recognition data, pinpoint needs with exceptional accuracy and continually improve your customer experience strategy.

### ***Deliver Information to the Customer***

Much of the time when a customer reaches out for help, what they really need is information. More and more, that information can easily, quickly and affordably be delivered via artificial intelligence. This makes customers happy because they get what they want faster and with less hassle. It makes you happy because you don't have to allocate your valuable rep time to issues easily addressed by technology.

### ***Speech Recognition Data***

The information that can be obtained by speech recognition software is nothing short of an information gold mine for your business. Scaling speech recognition software allows for AI and machine learning to sit on top of the data and become insightful. It can empower your reps with great information to facilitate better call handling on the spot. It can give you insights into how your customers view you and your competitors and even what things your competitors may be up to that you may not have otherwise known. Speech recognition software lets you test out different call scripts and let AI help you quickly determine which one is most effective. Patterns across multiple calls can be promptly identified, giving management the opportunity to get in front of some issues and proactively give customers the information they need without having to wait to get to a live rep while

simultaneously reducing the call volume load on reps.

One of our clients, a leading Wireless Internet service provider, previously utilized traditional QA methods, which helped them, understand the reason of the customers call and what the consumers were saying. The feedback was interesting, however, when compared with the amount of calls they were receiving, the sample size was simply too small. After a month of utilizing Artificial Intelligence to help with this issue, they were able to process all of the calls for two specific skill sets that provided them the below key business insights:

- Major Call Reasons: Customers called because:
  - They were moving and wanted to cancel the accounts
  - They had issues connecting to the services or getting logged in
  - They cancelled previously but now wanted to reactivate
- Negative Customer Sentiments: Customers were unhappy because:
  - They were charged on closed accounts
  - They had speed and connection issues
  - They were calling to check refund status multiple times
- Agent Performance: The agents failed to:
  - Provide effective rebuttals to retain the customers

- Probe and effectively troubleshoot the reasons for customers not able to connect
- Provide complete details on refund that increase repeat calling

While the traditional QA would sporadically pick up on these issues, the AI provided proof that these issues were much more common and happening quite frequently.

By understanding the issues, the client was given recommendations that included:

- Steps on website for reactivation (This will reduce the call flow by 16% when customers are educated vs. calling the contact center)
- Notification and automated system to avoid charges on closed accounts (This will reduce the call flow by 5%, and also increase customer satisfaction as this was one of the top three negative sentiment drivers)
- Agents were coached to save, but with AI and listening to 100% calls, it helped in ensuring that the coaching was implemented on the call, and if customers were retained
- Handle time was reduced with automated IVR customer verification VS verification on the call

Benefits:

- Increased customer satisfaction
- Increased Agent morale and performance with targeted coaching

- Reduced Cost through:
  - Reduction in call volume
  - Reduced handle time

### ***Pinpoint Needs with Exceptional Accuracy***

Not only can speech recognition tell you what a customer wants or needs, what makes them unhappy (wait times, pricing, etc.) and what it will take to make them happy, and you can get all of this information faster than you could ever get it without AI. Remember: you can't expect to fill a need you don't know about or truly understand.

### ***Script Testing***

A/B testing is not just for marketing anymore. Your company might be rolling out a new product and you may therefore logically expect some increase in calls as customers seek assistance getting their new products properly setup. But, just how much help is enough and how much is too much? Perhaps you have two different call scripts, one of which goes into far more detail than the other. You might be concerned about using the longer one because you feel people would be put off by spending that much time on the phone with a rep, but if you use the shorter script, are you leaving out too many important steps that in the end compromise the customer experience? You don't have to choose because AI lets you test both scripts and see which is most effective.

### ***Event Response***

Sometimes calls into your contact center are generated by events external to your company. A new governmental regulation and a competitor's announcement are two examples of things that may raise questions from customers. For example, imagine that you are in the insurance industry and news just broke out that a competitor is under investigation for allegedly raising premiums without telling customers. Even though your company is not named in any way, it is logical for your customers to wonder about their own premiums. Suddenly, you notice an increase in requests to review accounts as people want to check on their premiums with you. AI doesn't just have to let you know that you're getting more calls but it can actually tell you why and give you the chance to create new scripts to most effectively address these calls. This can result in less time needed to handle these calls and, ideally, more satisfied customers.

### ***Product Enhancements***

It's important to remember that a customer's experience extends far beyond their contact center interactions with you. It also includes their experiences actually using your products or services. Let's go back to the first scenario above in which you launched a new product and experienced a jump in calls from customers needing help to get things properly set up. Even if you have the best call script or automated assistance in which customers can get

the help they need in minimal time that may not be getting the most out of your AI. AI can raise the flag for a broader need. If a high volume of calls indicate that customers are continually unable to understand how to complete some very basic tasks because your product UI is not intuitive, that information should be funneled to the product teams. They can then use your data to help improve their products and eventually reduce or eliminate the need for calls on the subject altogether.

# 7.

## Listening to Every Customer With the Help of Artificial Intelligence

### *Customers are Everything*

Your customers are the lifeline of your business and must be at the center of everything you do. When you listen to your customers, you are able to understand their needs, customize products and services accordingly and create a great customer experience. A great customer experience not only translates into a successful brand and business, but also helps to increase market share. The best way to make a customer feel important is to ensure they know that you are listening to them. If you are listening to only few of your customers, you may not be able to keep them all satisfied, which will eventually lead to high customer churn.

### *Listen to the Voice of Customer (VoC)*

Since Customers are everything, businesses must ensure that they are listening to the Voice of Customers (VoC). This not only helps in identifying issues, but also helps in finding additional opportunities for your product offerings. When you ask for feedback, customers feel valued, but just filling out surveys on a fast food receipt to get a free sandwich or a discount is not enough. Customers truly feel valued when companies act on their feedback and then communicate back to them. When you listen to your customers and respond accordingly, it shows that you really care, helps keep business, generates repeat business/referrals and also increase brand loyalty.

### ***Analyze the Voice of Customer (VoC)***

There are multiple opinions in the industry about what the best tool in the industry is for gauging VoC, and while the tools may differ, the “voice” can be categorized into two forms based on the data that is captured, i.e. structured and unstructured VoC.

- *Structured VoC*: This is the data that is captured through surveys, polls, questionnaires, cancellations and website experience; and is easily processed and measured with conventional systems.
- *Unstructured VoC*: In today’s times, customers initiate contact via multiple channels such as phone, email, chat and social media. These call

recordings, email/chat transcripts and social media mentions are a rich source of data for what customers are saying but need help from analysts to make feedback actionable.

61% of customers call a contact center to talk to someone via phone either because they prefer to talk to a real person, or because they were not helped through other channels. While these interactions are rich in data, only 2% of them are actually listened to, and only some of the feedback is retained and then acted upon. The AI Speech Analytics engine transforms this unstructured data into a structured indexed data that ensures you are listening to all your customer interactions, analyzing them and have a broader view and insights into the “real” VOC versus the sampled version that is obtained through surveys, polls and traditional quality assurance methods.

As a summary, when you utilize Artificial Intelligence to listen to your customers, analyze their feedback and act upon it, you have all the ingredients that are needed to help you make decisions that will have the greatest positive impact on your business and customers.

# 8.

## Artificial Intelligence as a Driver of Better Business Decisions

The manner of business decisions you make is dependent on your experience, your goals, and your understanding of the current needs of your business. To make these decisions, you need access to the best data possible to correctly inform your decisions. If you are given incomplete or incorrect information, the decisions that will be made may not help you reach your goals and put you at a disadvantage versus your industry competition.

When booking a hotel reservation in Austin, TX, one team looked for the best prices and found some unbelievable deals. However, before booking, they called these hotels and checked their amenities such as WiFi, parking and breakfast, all of which are important for a business traveler, and all of which were a-la-carte and not included in the reservation prices. What the team thought were great deals were now no longer even a viable option.

Are you reviewing only the data you receive to make your decisions, or also determining the sources, the legitimacy and if the right questions were asked to gather that data?

Let's take a moment to look at the impact artificial intelligence is having on the business world outside of the contact center arena. AI is essentially leading the charge to make scientists out of today's leaders, facilitating smarter decisions and outcomes. It also allows businesses and consumers to make smarter decisions thanks to the ability to make predictions more quickly.

### ***Turning Leaders into Scientists***

It's a fact that executives are people like the rest of us. Like all of us, they approach any major business decision with their own sets of biases and emotions. Smart executives, however, know that their decisions must be supported by facts when making far-reaching decisions. Enter AI. More and more leaders are looking to the big data that only AI can provide to help them better direct their organizations. In fact, in a recent PwC survey, executives indicated that they would rely on algorithmic data for at least 41% of the weighting in their next strategic decision.<sup>1</sup>

The accessibility of data allows leaders to test hypotheses, much as a scientist would. The data returned can either confirm or deny the original thoughts but either way provides invaluable guidance forward.

## ***Predicting to Win***

Predictive analytics have thrust tremendous power into the hands of many industries. In health care, for example, it is used to design treatment plans that better address patient needs while saving money at the same time. In the financial services industry, investors can look to data for bid strategy guidance.

Knowing when to let the machine do what it is programmed to and when to let the human do what they have been trained to do is an important element of making AI work for business. Doctors and financial planners use AI as tools to help design effective treatment plans and investment strategies. The whole process is interactive and not a second guessing of what the software comes up with.

# 9.

## Flexibility and Analytics – Your Keys to Customer Engagement

Getting customers to engage with you is vital. It's another way for you to stay connected with them and at the top of their mind for not only today's purchasing decisions but tomorrow's as well. Artificial intelligence can play a large role in engaging customers but should not be relied upon to do this on its own. The combination of people and AI working seamlessly together, is what will really differentiate you from your competitors and achieve the engagement you need to be successful.

### *Deliver the Human Touch*

AI should never be thought of as a complete replacement for humans. Instead it is a way of allowing humans to do what really only they can do best, in part by allowing technology to do what it can

do best. One of the things that technology can do for you is to identify if you are giving your customers the right level of human interaction. Are human reps being used at the right touchpoints? Does your system know when to bring in a human? Does this happen too soon? Too late? Let your analytics guide you to the right balance to maintain satisfaction and engagement.

### ***Engage Across Multiple Channels***

Every one of your customers is a unique individual and they are not all going to want to engage with you in the same way. Similarly, one single customer may want to engage with you in multiple ways even for a single issue. AI is the way that you can accommodate these demands.

While phone is still a highly preferred method of interacting with contact centers, it is predicted that by 2018, 49% of consumers will interact with contact centers via mobile apps.<sup>1</sup> That said, it is also not just enough to offer multiple ways for customers to engage; you must also allow customers the ability to switch between communication methods seamlessly. Don't make them go through an automated system where they input all of their information only to have to repeat it again when they talk to a live rep.

### ***Connect to the Bigger Picture***

As discussed earlier in this book, AI can collect data that may be useful to many parts of your

organization, product development being just one example. However, this takes human eyes as well as technology to know what data should be shared with what departments. Bringing people and AI together in this way leverages your contact center data far beyond the contact center.

# 10.

## Transforming Your Quality Analysts Into Business Analysts

While most organizations have some manner of Quality Assurance methodology in place to ensure that their customers' key compliance and quality criteria are met, all of us will agree that Quality Analysts are bound by check boxes in a QA form or saying something was done or not done throughout the interaction. With the help of artificial intelligence, you can transform them into something much more powerful. Let us show you how!

One of the primary benefits AI brings to your contact center is in the form of data, and what you do with that data is what really matters in the end. You need to be prepared to take the information and use it to empower your reps. How do you do that?

### *Start at the Top*

Before you identify what items you want to track or measure with AI, you should identify the business goals you believe your contact center can support. For example, your organization might have a stated goal to improve the customer experience. This is

clearly something to which your contact center can contribute in the areas of QA, 1<sup>st</sup> contact resolution and many others.

### ***Look at the Whole***

Your contact center's AI may often provide insights that other parts of your organization may find useful. Understanding the larger business goals can help you determine what nuggets are worth sharing with what departments in order to facilitate meeting larger company goals. Training your reps to look for this information is also important and helps them to grow and understand the bigger picture about how their role really matters to the company.

### ***Combine Evaluation Methods for Speech Analytics***

When using AI, you will certainly want to rely on auto-scoring of speech analytics, but you should also use manual reviews for a small portion of calls to ensure your AI remains properly calibrated with your expectations. In addition, it is important to properly determine what phrases or elements of the call should be mined for speech analytics. Things that tend to be most effectively measured in this way include greetings and closings, the collection of information to verify identity and the general empathy level of a rep.

A super analyst tactic with speech analytics is to combine reviewing this data with a look at overall customer satisfaction data. This might be from things

like the average time to answer a call or even customer surveys. The bottom line is that you must remember speech analytics should always connect back to the overall customer experience. It is highly possible that a rep properly uses all key phrases but that a customer is still left unsatisfied. It is equally possible that the root of the customer's lack of satisfaction is unable to be addressed by the rep through no fault of their own, but is something another member of your team could resolve.

### ***Get Reps Involved in the Evaluation Process***

From the very beginning, your reps should know that call monitoring is simply part and parcel of your operation's processes – not because you don't trust them, but because your customers' experiences matter that much. Let your reps be part of the evaluation process from identifying things to track as well as using calls as real-life learning examples. This may be in the form of formal training sessions or weekly mini-reviews.

Speaking of weekly reviews, it is best to have a weekly cadence for call reviews rather than monthly so as to make this a very normal part of your work. Reps should also be able to ask to review specific calls with managers or even with peers in order to get feedback and learn. When they do this, the calls used should not be included in rep scoring because you do not want to hamper a rep's proactive request for learning.

### ***Calibration Across the Organization***

When measuring a call, against what do you measure it? This question must be answered from the outset, and the answer should be agreed on by reps, contact center leads and upper management alike. This cross-organization alignment is another way of ensuring that your contact center is working to meet larger company goals.

# 11.

## Better KPIs Through Combining People and AI

Identifying the right key performance indicators is an important part of making sure you accurately measure the effectiveness of your contact center and your AI software, but that's not the only part of getting the most out of your AI capabilities. There are things that technology can do better than people but there remain some things still require a human touch. Putting the best of these two resources together is what ultimately can deliver you the best KPIs possible.

Pulling the right data from calls is step one. Step two is putting that data into an understandable format. Step three is then having the information be reviewed by contact center management. It is here that trends can be seen and decisions made. These decisions are then able to be used to further direct future AI system activity and the cycle will become one of ongoing process improvement.

When done correctly, you will be able to:

- Pin down the exact reason for a customer call.

- Offer enhanced solutions based upon what has worked for other customers with the same or similar problems.
- Provide tips at critical points in a call, reducing the length of time needed to resolve an issue.
- Identify customer stumbling blocks to streamline call resolution.

You will also have the ability to know if a call is a repeat attempt to resolve an issue or when issues are able to be effectively addressed in only one call.

At the end of the day, reducing time spent per call can save money, improve productivity and boost customer satisfaction. But, because working with human beings is never black-and-white, the targeted involvement of personal review of AI data is a recommended step in identifying the KPIs you should track to achieve these goals.

### ***Customer Satisfaction***

Call analytics can help you get a window into how well your contact center performs from the eyes of the people who matter most—your customers. You should track the following here:

- Customer Effort —a score that represents an overall sentiment and thought on the part of the customer.

- Customer satisfaction index—a compilation index that indicates general satisfaction levels.
- Customer efficiency score—a score indicating how efficient customers view your contact center.

Customer retention rate is another factor you can measure that may indicate overall satisfaction. Greater satisfaction will lead to less churn and strengthening of your brand.

# 12.

## The Noble Blessings of Contact Center Evolution

One way to understand the evolution of the contact center is to take a quick look at some of the automation technology that has graced this industry over the years.

Two of the most influential technologies in the world of contact centers have been automatic call distribution (ACD) and interactive voice response (IVR) systems. However, these once industry-leading technologies are fast going by the wayside as new players take center stage. More and more, these systems are associated with an increase in customer frustration, not the decrease that a contact center wants and needs to achieve. What is replacing ACD and IVR systems?

Virtual reps have proven successful and email interestingly continues to be popular and has grown in its use and effectiveness. Web chat with an

intelligent interface between customer and agent interactions is found to be beneficial in improving customer experience. Web chat with AI intelligently represents a specific set of information captured during a chat session. Sensitive data such as credit card details, personal phone numbers, certifying information, validation data, in-chat survey data and much more, can now be handled “behind the scenes” by the AI while the agent is effectively engaging the customer. The result is higher customer satisfaction scores, lower handle times, completely secure transactions and increased sales. Skills-based routing, callback features and estimated wait times have all emerged as useful in today’s contact centers. Of course, the ability for reps to receive accurate information about their customers is of special benefit to them.

### ***Humans or Technology?***

Seeing this recap of some of the technology that has fueled the modern contact center, one may wonder if humans are even needed anymore. The answer is: absolutely. At least today, there is no technology that is able to effectively replace a human. What today’s technology does is allow humans to do different things by freeing them up from other tasks. The most successful contact centers will be the ones that know when to use technology and when to use humans. For example, transactional-based needs may be more easily fulfilled by a machine whereas detailed procedural issues may require a human being.

### ***Choosing the Right Technology***

When technology is identified as a reasonable alternative, the next step to success is to identify the right technology. It is equally important to avoid the “technology for technology’s sake” pitfall. Any artificial intelligence or other function that is put into use must be done so with a specific purpose in mind. It must solve a direct problem and that problem should never be first and foremost the contact center’s costs; rather, the problem should always start with improving the customer experience.

Choosing the right technology solution can also be about choosing the right time to use that technology. Some experts indicate that systems like callback software should be kept and used only when call volume is extremely high. Using these features on a regular basis can actually end up becoming a crutch and adding to the level of complexity for a customer and a rep.

### ***Reducing Customer Frustration***

As mentioned above, a contact center essentially exists to eliminate customer frustration. Therefore, it is important that the use of any technology supports this goal. That may mean knowing when to bring a human into the picture even if a machine has initiated the contact. It may also mean keeping things simple and reasonable. A menu that requires a person to select through seven options is too complicated.

Every customer should also always have the option of reaching a live service rep if desired.

The best way to know if your contact center plan is a solid one is to test it out yourself as a customer. Every single decision made should be made from the customer experience perspective.

# 13.

## Why Technology Is Nothing without People...and Neither Is Your Business

There was time when, for many people, driving a car was a dream. Now technology has progressed to the point that driverless cars are being tested in many metropolitan areas. But a driverless car is still built for a passenger to reach their destination, or may be to deliver a cargo from point X to point Y for use by customers. Technology is nothing more than a means to provide convenience to humans.

As we have said, the whole point of your contact center is to help your customers—people. They are contacting you because they have a problem and they need it solved. It is your job to figure out how to do that in the best way possible. It is your job to make people happy. It's about people. And, at the end of the day, only people can really make other people happy.

Yes, the contact center of today and certainly tomorrow must rely on technology. But, that does not mean that your contact center does not need you—or other people. In fact, one could argue that your contact center needs people more today than ever before.

The demands on your contact center are greater than ever. From an omnichannel presence to a customer expectation of virtually instant assistance, you are pummeled on a regular basis with needs from all angles. Technology can be your best friend in answering these calls and turning disgruntled customers into happy people, but it cannot replace you.

Perhaps one of the best ways to think about this is to look at how top recruiters today consciously evaluate the “how” as well as the “what” in potential candidates. There may be two people vying for a job and one may have superior skills or knowledge, yet may display a serious lack of interpersonal skills. The less qualified person, however, may end up becoming the company’s choice for his or her strong interpersonal skills. Knowledge can be gained. It is far harder to learn how to behave well at work, especially as people get older. This emphasis on soft skills cannot be overemphasized, especially for the contact center which deals exclusively with people.

# 14.

## Embracing Technological Development

We all know that change is inevitable, constant and something that most of us resist, but the only way for businesses to succeed and stay competitive is to stay updated on new innovations, understand their benefits and get on the “change train” before others do. You can choose to play the “wait and watch” game, but your competitors and customers will likely leave you behind. Remember the fates of Blockbuster, Nokia, Kodak, Motorola and many others that lost their edge just because they waited too long to adapt and evolve.

As it should be clear to you by now, contact centers either need to get in on the AI game or, well, let’s just say they need to get on board. But, what exactly does that look like? Who owns the responsibility for embracing technology in the contact center? We would suggest that the responsibility is actually a shared one.

### ***The Rep's Responsibility***

Individual contact center reps must remain open-minded and accepting of changes that come their way. Instead of feeling threatened by technological advances, they should embrace them as opportunities to improve their own performance.

### ***The Organization's Responsibility***

Companies should never think that the technology they employ today might be “the” thing because tomorrow will certainly bring about a new “thing.” Choosing which technology to implement when -and why - is where the art of advancing contact center capabilities comes into play. Leadership should always know that change is an ongoing necessity to remain competitive in today's marketplace.

### ***The Academic Responsibility***

Whether in undergraduate environments or professional development settings, the continued focus on training and evolving to meet new needs and capabilities should never be lost. This can actually be an integral part of instilling a mindset of continual learning and improvement into individuals and organizations alike.

It is essential when adopting new technologies that buy-in at both the rep and the company level occurs. Reps need to know that the company supports them and that an implementation will not be done halfway. They also need to be encouraged to embrace their

new and growing roles, understanding that technology is not there to replace them but to allow them to expand what they can do.

For some companies, this may represent something of a culture change which does not happen overnight, which goes back to the importance of support from all levels of the organization from the top down.

# 15.

## Your Future Growth Is Technology-Driven and Human- Centered

For decades now, doom-and-gloom reporters have predicted mass job loss at the hands of technological advances. In fact, some have gone so far as to suggest that technology could actually replace humans. But, the time has finally come in our current phase of industrial revolution where we are maturing to the point of understanding the unique place for both technology and humans. In fact, done right, there can be an otherwise unattainable synergy when both are used together. That, by definition, precludes the mass job loss and especially the full-scale replacement of humans with technology.

Perhaps one of the best examples of this shift can be seen in the technology industry itself. Companies like Google and Facebook have for a long time hid behind the guise of technology as the force behind

what content is served up. By pointing to their algorithms, they could maintain a neutrality and avoid responsibility for anything that may in any way not meet the mark.

Now, however, these companies are looking to interject humans into the content mix. Editors will be involved along with algorithms to make decisions about what information and content is displayed when, where and why. The limits of the algorithm, it seems, have been acknowledged loud and clear.

There is no doubt that the growth of technological advances will drive the growth of business solutions, customer experiences and revenue streams; but, at the center of all these areas, it will be humans that will dictate what will stay and evolve, and what will get scrapped. New innovations are driven by human needs. Technology should be looked upon as an essential and valuable tool but one that is used to serve human needs, and one that is never meant to replace the human element.

# 16.

## **An Important Reminder: Artificial Intelligence Should Enhance, Never Supplant**

In addition to the limitations of technology as a reason for the continued involvement of humans in contact center work, there are also financial realities that make this essential. Clearly we have seen technologies promised to be the next best thing fail to be that (IVRs, for example). Those technologies that are actually capable of making substantial positive changes in the customer experience can be costly, and these costs are not just borne up front. The ongoing expenditures and infrastructure changes that may be required are simply out of reach for some companies.

When you stop to consider that one of the benefits of automation in the contact center is an ultimate

reduction in costs to the business, it quickly becomes evident that an overly expensive solution simply won't make the cut. The completely automated contact center, it seems, is nothing but a figment of someone's imagination.

# 17.

## Why Artificial Intelligence Is Your Gateway to Success

All in all, it's all but impossible to ignore the reality of artificial intelligence as your path to creating a successful contact center, and why would you want to ignore this reality anyway? It's a bright shining light for the future of our industry because it leverages not just data but also the machine learning that allows systems to deliver actionable insights. These insights can drive business decisions, empower reps and ultimately delight customers.

- ***Customer-focused***

First and foremost, everything you do in your contact center should be for your customer. This is true whether it is delivered by technology or by a person. When it comes to AI, before you go down a path, ask yourself if that path will improve the customer experience. Will it give the customer what

they need and will it give it to them their way? If yes, you're on the right track.

- ***Organized***

One thing that machines can always do faster and better than humans is sort through and organize data. This gives your contact center the ability to help customers have their problems solved faster, often without the need for human intervention. Your reps are therefore allowed to grow and work on things that they couldn't before—and solve those customer problems that a machine simply cannot.

- ***Integrated***

Knowing when to use technology as your virtual assistant and when to let the human be the expert is a critical component of making AI work for you.

- ***Adaptable***

The best AI tools will not only be able to absorb and spit out data but actually learn and adapt to that learning. It's like the difference between Google's once-employed reliance on literal keywords to return search results to its now ability to understand the point behind a long-tail keyword phrase. The goal is always to give the customer what they want with less hassle and in less time.

AI in the contact center:

- Puts customers' problems first by going beyond basic facts to understand the emotion and need behind them.
- Allows your reps to grow and work on things they couldn't before.
- Adapts and learns so as to fuel your ability to give customers what they want with less hassle and in less time.

So, are you ready to put artificial intelligence to work for your contact center—and for your customers?

# Glossary

## Sources:

- TCN - <https://www.tcn3.com/home/>
- 1to1 Media - <http://www.1to1media.com/>
- Deloitte - <https://www.deloitte.com/>
- Betanews - <http://betanews.com/>
- CallCenterHelper-  
<https://www.callcentrehelper.com/>
- Rank Miner - <http://rankminer.com/>
- Xdroid - <http://www.xdroid.hu/en/home>
- Forbes - <http://www.forbes.com/>
- PTP - <https://www.ptpinc.com/>
- NTT Technical Review - <https://www.ntt-review.jp/>
- Clarabridge - <http://www.clarabridge.com/>
- TechTarget - <http://www.techtarget.com/>

Today's consumers want more than good products and good prices. They want good service and an effortless experience as well. In fact, they demand it. They want it fast, they want it good and they want it their way. Part of the challenge for contact centers is that "their way" varies from customer to customer. While one person's way is via phone, another's is via an app and yet another's is via social media. To be successful in today's environment, you've got to be everywhere all the time.

What happens if your company isn't everywhere all the time? Your customers will leave you. And, as if that's not bad enough, you can expect up to 95% of them to tell their friends, family and coworkers about their bad experience. Believe it or not, that is exactly what is happening in American commerce today. How much of an impact can this have? \$41 billion. That's how much sub-par service is said to be costing U.S. businesses every year.



**Matt Rocco**  
**President**

Matt is a 32 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. Matt has spoken at many industry events and has been featured in articles in numerous periodicals including CIO Review, Call Center Magazine, Call Center Times, Connections Magazines and others.



**Jim Iyob**  
**Chief Customer Officer**

Jim has responsibility for Etech's strategy, marketing, business development, IT, program implementation, operational excellence and product development across all of Etech's existing lines of business – Etech, Etech Monitoring Solutions (EMS), Etech Technology Solutions (ETS), and Etech Social Media Solutions.