Evolving AI

Practical Applications in the Contact Center

LIVEVOX

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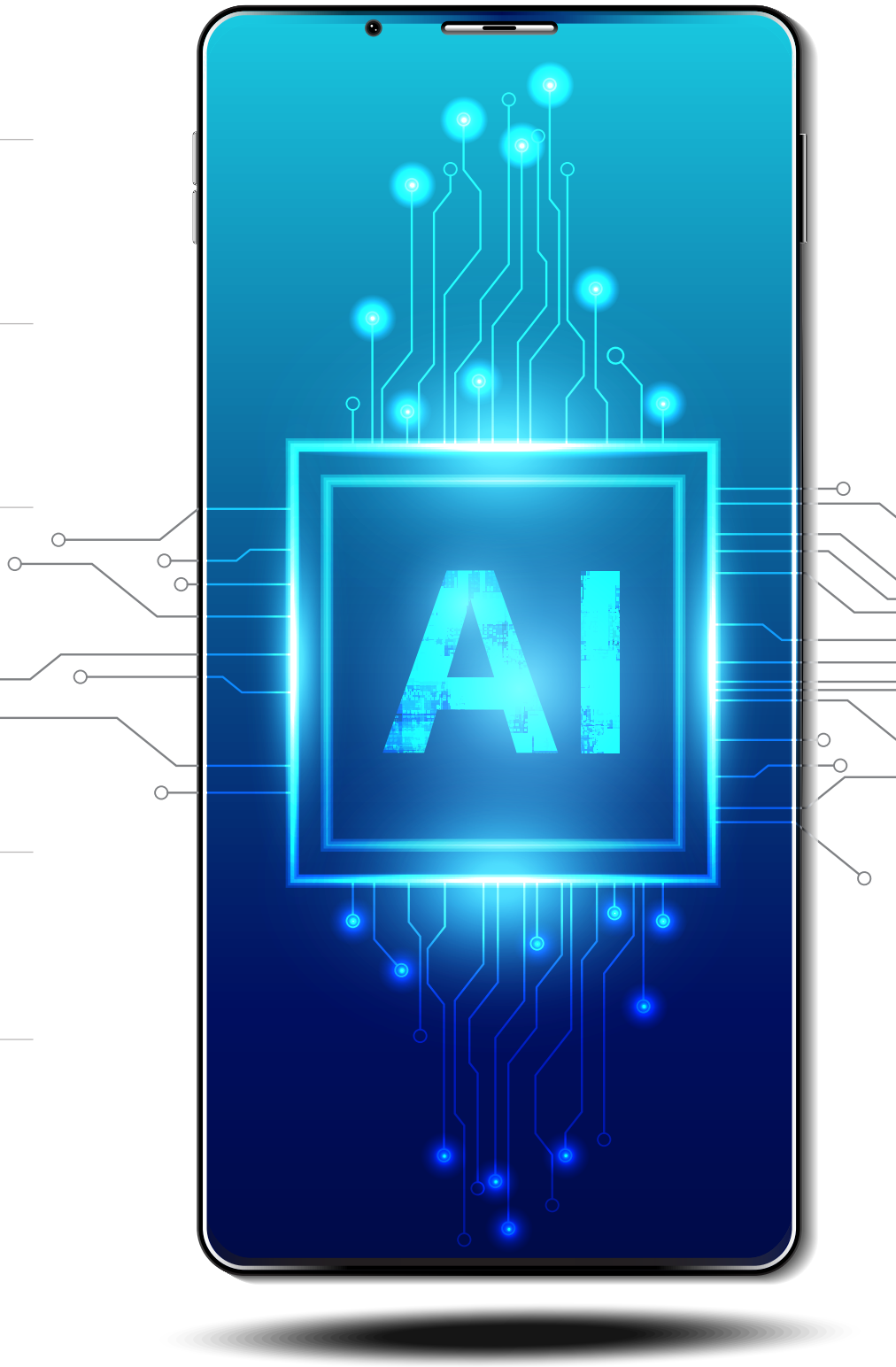


EXECUTIVE SUMMARY

The AI Landscape

AI is no longer a fanciful concept on the far-off horizon. It's become an integral part of life as we know it, responsible for getting us from place to place, reminding us of important events, and even protecting our homes from intruders.

AI's applications in a commercial setting are even more powerful. We can use it to automate tasks, drive down costs, and serve customers faster and more efficiently than ever before, fueling the kinds of innovation we'd once only dreamed of.

The landscape of AI in the contact center—both as it exists right now and what's on tap for the imminent future—is dynamic and exciting. Here are a few of the highlights.

Automating manual tasks is the norm, not the exception

Logging call records, updating customer data, setting follow-up reminders, running reports—all of these tasks we used to perform manually can now be done by a machine without a second thought. It's an encouraging sign that adoption of more complex AI use cases doesn't have to be an insurmountable hurdle, as some naysayers might have you believe.

Natural language processing is stronger than ever

...And it's only getting better with time. Just a few years ago, the capabilities of natural language processing were limited to recognizing and relaying words, either written or verbal. Now, AI-powered tools can not only tell what's being said, but infer what is meant. This ability to process language and draw meaning from it opens the door to a new world of data processing capabilities and real-world applications.

AI-human interactions have become second nature

We've become so used to seeing AI in action that we don't even think twice when it's happening. At first, you might balk at that statement, but think about the last time you used Google.

Were you shocked when the search engine completed your sentence before you could finish typing? Not likely. In fact, you've probably become so accustomed to it that it didn't even delight you. Instead, it was what you expected from the interaction. This shows us that we're not only highly adaptable to the use of AI, but are primed for more.

Early AI adopters report an improvement of almost

25%

in customer experience ratings[1]

This is just the beginning

Customer experience is the leading driver of AI adoption among businesses[1]. And it pays off—early AI adopters report an improvement of almost 25% in customer experience ratings. Furthermore, automated customer service options like virtual agents and bots are the number one use of AI among large companies.

And yet, despite its many upsides, AI adoption in actual business settings lags behind expectations as we enter 2021. Despite many companies reporting an anticipated increase in AI spending, fewer than 10% of them actually currently deploy AI in their work[2]. This means there's a massive opportunity for innovative call centers to set themselves apart and create a distinct competitive advantage through the use of AI. The remainder of this book will help you do that.

Here's what you can expect from each chapter:

Chapter 1 explores the truth about AI in the contact center, dispelling some common myths and explaining how machine learning can be used to enhance rather than replace human agents.

Chapter 2 describes how an omnichannel call center platform drives the kind of robust data collection that's needed to form innate intelligence.

Chapter 3 is your implementation playbook, covering practical applications you can use to put AI into practice in your contact center today.

Chapter 4 will focus on the financial upsides of employing AI, while Chapter 5 will cover the metrics and KPIs for AI success.

Chapter 5 hones in on the metrics to monitor post-AI implementation, adding new KPIs to better assess the performance of your new intelligence tools.

CHAPTER 1

The Truth About AI in the Contact Center

What does the future of AI in the contact center look like?

If you asked some C-suite executives or tech leaders, they might have you believe it's a room full of robots that have taken over on the customer service front, rendering human agents all but useless. Such visions, ambitious as they might seem, are usually cooked up by big thinkers who are far removed from a contact center's day-to-day operations. In reality, this picture couldn't be further from the truth.

The truth about AI in the contact center is that despite its exciting and promising capabilities—and there are many of them—it cannot and does not replace the capabilities of living, breathing agents. Instead, AI in the contact center is at its most effective when it's used in a complementary fashion with human agents, to enhance their output rather than attempting to take their place.

For contact centers, AI's greatest power lies in its ability to tackle certain tasks that can't be performed by a human, at least not with efficiency at scale.

AI in the contact center isn't a room full of robots.

Automation

Tedious, manual tasks are one of the biggest drains on call center agents' time and energy. The repetitive nature of contact center work is a driving factor behind the industry's high attrition rates.

AI can automate manual, repetitive contact center tasks like answering the most frequent customer questions and resolving simple issues, allowing agents to focus their efforts on more complex work. This not only reduces handle times, but lowers the incidence of agent burnout and contributes to higher engagement.

Predictive analytics

Much of an agent's success hinges on their ability to accurately understand and diagnose a customer's issue in order to resolve it. With AI, we can anticipate the most likely reasons for a customer's inquiry and proactively offer steps to resolve it, leading to faster resolutions and greater customer satisfaction.

Additionally, AI has the ability to analyze massive data sets in seconds and detect patterns that would be indiscernible to the human eye. This capability can be leveraged against call volume and context data to achieve maximum efficiency in call center staffing and scheduling, which leads to reduced costs and improved performance metrics.

Real-time feedback

In addition to analyzing historical data, AI's pattern-detection capabilities can be applied in real time. During live customer interactions, this becomes an invaluable tool for suggestive scripting and other strategies that help agents provide better service and achieve more first-call resolutions.

Coaching is also easier and more effective thanks to at-a-glance agent metrics and tailored suggestions to improve performance.

Always on

There's one thing all of these AI applications have in common: they revolve around using data to do things that humans, on their own, can't achieve.

This means you can offer round the clock support, monitor traffic and activity automatically, and feed findings into your self-service workflows.

In the next chapter, we'll talk about how the collective body of data created by contact centers is greater than the sum of its parts.

5 Ways to Employ an AI-Powered Virtual Agent

Internal Use

Intelligent IVR

After-hours or contact peaks with limited use cases

After-hours or contact peaks with extended use cases

Round-the-clock virtual agents

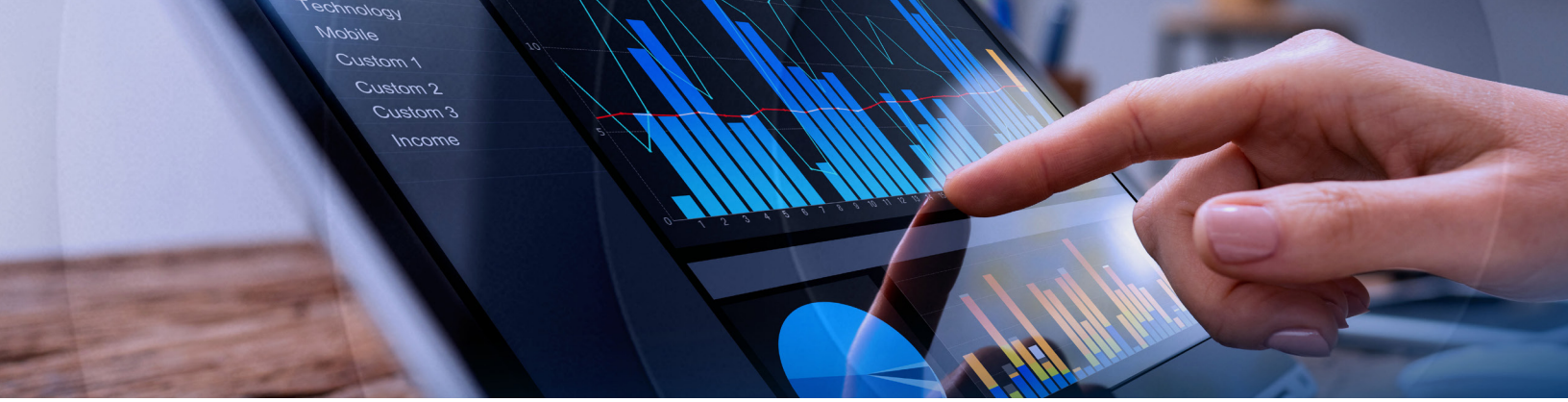
CHAPTER 2

Data Creates Innate, Not Artificial Intelligence

There's a lot of talk in the technology world about artificial versus innate intelligence. Both serve a purpose, and both can be found in humans and machines. So what's the difference?

In humans, the difference between innate and artificial intelligence could be conveyed by comparing our knowledge of how to breathe to our decision on what to have for lunch. Breathing is innate—we do it without having to consciously think about it. Deciding what to have for lunch is a calculation of sorts, based on a number of input factors we've been "programmed" to understand, like which restaurant will get us in and out the fastest and which one has a good lunch special on Tuesday afternoons.

With machines, we can draw a similar comparison. Artificial intelligence begins with equations we've programmed the machine to understand, like that an input of X should result in an output of Y. The more a machine "learns," however, the more innate its decisions become, relying not on our programming but on the machine's understanding of the world in which it exists. At a certain point, its intelligence capabilities can exceed the calculations we've instructed it to perform.



More data drives better AI

If there's one thing that makes contact centers ripe for disruption by AI more so than any other industry, it's their abundance of data. More data, as we just explained, is what powers AI to get "smarter," more powerful, and more useful in practical applications like a commercial environment.

However, more data alone won't drive the kind of advances that are needed to bridge the gap between artificial and innate intelligence. To do that, we need a cohesive system in which that data can live and propagate. That's where an omnichannel call center platform comes in.

An omnichannel, cloud-based software platform serves as the unifying layer needed to best enable AI and its implementation in the call center. It brings the data from all of the disparate sources together in one place, in a standardized format, so that all parts of the machine—and the humans that program and interact with it—are speaking the same language.

Data drives innate call center intelligence that improves the customer experience in three ways.

Greater personalization

When everything you know about your customer is housed in one place, you can quickly harness that data to create the highly personalized experiences that modern customers crave. From the customer's demographics to their product catalog and ticketing history, machine learning helps you draw on this data and combines it in innovative ways, helping agents deliver tailored solutions that not only improve satisfaction, but drive revenue.

A holistic customer view

As humans, we know that the people we interact with aren't one-dimensional. They're more than just a list of characteristics in a profile. And yet, getting machines to that same level of understanding is a challenge.

An all-in-one call center CRM facilitates a holistic view of the customer built from the many diverse sources of information we have to draw upon. Such a view breeds more meaningful interactions and more precise customer intelligence.

Seamless conversations

Finally, bringing data together in an omnichannel platform has the highly practical side effect of creating seamless interactions—conversations that can continue uninterrupted from one channel to the next with nothing lost in translation. Not only is this the closest reproduction of the way conversations unfold in real life, but the most practical way to serve customers in a call center business environment.

On that note, we're dipping our toe in the waters of the practical applications for AI in the contact center. It's an exciting topic we'll talk about in more detail in Chapter 3.

CHAPTER 3

Practical Applications for AI in the Contact Center

Up to this point we've been thinking mostly in general terms about AI, where it stands and where it's headed. This chapter, however, is perhaps the most compelling of this ebook because it's where we'll dive into the specifics: the real-world contact center applications where AI isn't just on the horizon—it's arrived.

Here are three practical uses for AI that are already changing the contact center landscape in a major way,

...helping organizations accelerate positive resolutions, boost customer satisfaction ratings, and improve top-line revenue.

Speech analytics

Speech analytics uses machine learning to analyze a customer's words—either spoken or written—in real time. It's a powerful tool that can not only glean meaning from a string of words and phrases, but infer things like a customer's tone, inflection, and sentiment, factors that can influence the direction and outcome of an interaction.

With the help of a real-time speech analytics tool, a call center agent can gain invaluable insight about a customer's frame of mind and use it to make decisions about the best course of action to take with the call, whether that's resolving the issue as quickly as possible, cross-selling complementary services, suggesting upsells, or escalating the call to a supervisor.

By combining speech analytics with AI, we can also flag calls that exhibit certain patterns, which can then be used to make business decisions. Call center managers, for example, might use this capability to pinpoint the most frequent customer issues to inform content for the online knowledge base or identify key words and phrases that indicate a strong opportunity for upselling.

Conversational IVR

Today's interactive voice response systems are more than just glorified call routing tools. Rather, they're helpful systems customers can actually use to resolve issues without ever needing to speak to a live agent, saving time on the customer's end and freeing up agents to handle more complex calls.

Conversational IVR comes in handy even in cases where a live agent interaction is the ultimate endpoint. By using IVR to gather the majority of customer information (reason for the call, nature of the problem, account number, and so on) before a live agent gets on the line, call centers can better manage high volume periods and attend to the most urgent calls in the order of priority.

And yes, IVR can be used to route calls, too, helping ensure agents are served the issues that they're most familiar with and can actually resolve. This contributes to stronger agent morale and more positive customer outcomes.

Agent augmentation

You can help agents carry out tasks and offer real-time assistance during customer interactions with AI augmentation tools like predefined scripting, coaching reminders in the form of pop-ups and call branching logic, and even knowledge base displays.

Virtual agents and chatbots

Gone are the days of stale chatbot interactions that all follow the same cookie-cutter script. The new wave of chatbots and virtual agents are sophisticated tools that can have dynamic conversations based on robust bodies of knowledge—once again, it all goes back to data.

AI-powered virtual agents learn from their past interactions, building up an ever-growing knowledge base and getting smarter with each new ticket. They "speak" like humans, using machine learning to discern meaning from a customer's words. For questions that chatbots don't have an answer to, they can seamlessly hand off chats to human agents and learn from those outcomes, becoming better equipped to tackle the issue when it comes up again in the future.

While we're excited about the promise of these practical call center AI applications and the new ones that are sure to follow on their heels, we see one clear takeaway: human agents are still very much part of the equation. AI moves to the frontlines, enabling automation and dealing with repetitive tasks, while live agents act as the customer service backbone, tackling issues that require a human touch with greater efficiency, speed and success than would be possible without the speed, of AI.

ONE CLEAR TAKEAWAY

Human agents are still
very much *part of the equation.*

CHAPTER 4

The Economic Impact of AI in the Contact Center

In recent years, it's become apparent that better customer experiences are linked with better business outcomes, like higher revenue and stronger brand loyalty. And yet, most contact center technology was developed years before this became a widely accepted piece of business wisdom.

While this is bad news for companies that continue to rely on legacy customer service systems, it means there's huge potential upside for those that choose to innovate with modern AI technology. The following are tangible business outcomes call centers can realize from leveraging AI strategically, all of which have the potential for significant bottom-line impacts.

Maximizing customer satisfaction

What do people want when they contact customer service? Ultimately, they're all looking for one thing: a fast, effective solution to their problem. AI facilitates speedier resolutions, more targeted troubleshooting, and more seamless experiences, all of which contribute to customers leaving the call feeling satisfied with the outcome.

It should come as no surprise that customer satisfaction is highly correlated with stronger revenue. One study, for example, found that companies that invested in improving their customer experience stood to increase revenue by a whopping 77% over three years[3].

Another study found that the company with the highest Net Promoter Score (a measure of customer satisfaction) in its market grows at an average of more than two times faster than its competitors[4]. These are just two examples of the myriad ways customer satisfaction is linked with stronger financial performance.

Deflecting inbound volume

As we've touched on in previous chapters, AI has great potential for helping contact centers manage incoming volume via better self-service options and more useful automated systems. Deflecting volume reduces wait times and alleviates labor needs, both of which come with fiscal benefits.

AI-powered tools like chatbots and IVR systems can significantly lower your average call wait and handle times, which allows you to achieve more resolutions every hour. This, in turn, drives revenue.

One shining example is Amtrak, which increased its booking rate by 25% and saved a reported $1 million on customer service costs by implementing an intelligent virtual assistant known as "Julie" on its website[5]. Julie handles an average of 20 million calls per year, helping customers resolve their most frequent requests like booking tickets and checking schedules.

Thanks to Julie, fewer agents are needed to accomplish these simple tasks, and the agents that are scheduled can tackle more involved inquiries like complex bookings. In addition to the cost savings, Amtrak reported a 50% rise in user engagement.

Encouraging self-service

Customers have lofty expectations surrounding the customer experience, with 90% saying it's 'important' or 'very important' to be able to receive a response from a company within ten minutes or less when they have a question[6]. Despite this, customers also want to be able to help themselves.

90% of customers think prompt service is important when choosing who they do business with[6].

Knowledge bases, for example, are a particularly preferable self-service option, with customers deferring to them above all other service channels when they're available[7]. AI can help you build a knowledge base that's constantly expanding based on continued learning from your human staffers and other available information sources, like training materials, call transcripts, your own website content and more.

Effective self service options—the kind that allow a customer to actually resolve their issue rather than just deferring their service call—can enhance your customer experience in a meaningful way. This, as we touched on above, is an engine for economic performance.

Agent retention

Finally, AI success isn't only about your customers. The agent experience and the customer experience go hand in hand, so you'll want to measure the impact AI is having on your staff's ability to do their jobs and their level of engagement. Increased agent retention should be an ancillary result of greater AI adoption in the contact center.

Now that we've established what AI's practical applications look like and how they can impact business outcomes in the contact center, we need a systematic way to measure our progress toward successful AI adoption. Read on for a discussion of metrics and KPIs in Chapter 5.

CHAPTER 5

What Does Success Look Like in the Intelligent Contact Center?

Contact centers are defined by their metrics. From speed to level of service, there are endless benchmarks you can measure and track to get a handle on the organization's performance. This is a good thing.

And yet, the standard KPIs we rely on to gauge call center performance, like average handle time and first contact resolution, aren't as straightforward when AI-powered and self-service channels come into the equation. For example, what if the customer tries to resolve their issue using your webchat portal but winds up needing to connect to a live agent—is that a first or second contact?

The new frontier of AI requires us to reconsider the metrics we monitor so closely, adding new KPIs where needed to better assess the performance of our intelligence tools and how they contribute to our overall success. Here are some of the top metrics to incorporate into your analysis.

Call deflection rate

Call deflection measures the portion of contacts that can be resolved via a non-human channel, like suggesting a knowledge base article prior to routing a chat to a live agent. The goal of deflection is not merely to reduce the volume of calls routed to agents, but to help customers resolve issues in the most efficient manner.

Measuring call deflection rate can be complicated because it requires you to do a bit of estimating about how many calls would have been routed to a live agent; because of this, each organization typically has their own method for calculating this metric. Generally speaking, though, your call deflection rate should increase with time after implementing new AI service channels.

Abandonment rate

Abandonment rate measures the percentage of inbound calls or requests that are abandoned by customers before connecting with an agent. It is calculated by dividing the number of dropped calls by the total number of incoming calls from customers. High abandonment rates have a direct correlation to longer inbound call queues and higher wait times. They also might indicate convoluted IVR menus or problems with your internal routing logic and workflows.

Improve abandonment rates with AI-enabled features like conversational IVR, IVR to SMS triggers, bot self-service, and virtual agents.

Cost per contact

In an omnichannel contact center, it's increasingly common for customers to use more than one service channel within a single interaction. Thus, it becomes more difficult and less practical to measure the cost of each channel separately. Instead, it's much more useful to measure the cost of each contact.

To do this, organizations should combine the total cost of each AI-enabled channel—email, live chat, knowledge bases, etc.—along with the labor costs of live agents and the technology costs of call center software, then divide that total cost by the number of interactions. This will result in a cost per contact, which we want to see decline over time.

Self-service success rate

Simply put, how many customer inquiries are handled via a self-service channel versus being routed to a live agent? This metric is usually expressed as a percentage of total volume, and the more AI-powered channels you offer, the higher it should be.

If, however, your self-service success rate decreases after implementing a new channel, it could be a sign the channel is ineffective, the user experience is poor, customers require more education on how to use it, and so on.

You'll also want to monitor self-service handle time to see whether the AI options you're providing are, in fact, faster than going through a live agent for the same issue, like making a payment. If this isn't the case, a closer look at customer use of these channels is warranted.

Customer satisfaction

Though AI can dramatically transform your customer service channels, the metric used to measure the effectiveness of those channels hasn't changed. Customer satisfaction is a baseline KPI that gauges how content your customers are with the level of service they're receiving. It's measured with tools like CSAT surveys and net promoter scores, and continuously improving it should be an organization-wide goal.

eNPS

Employee Net Promoter Score measures your agent satisfaction and can provide vital information about the morale, productivity, and job satisfaction of your frontline staff. AI-enabled workforce optimization tools such as speech analytics offer deeper insight into the health of agent to customer interactions by accurately recording and transcribing 100% of conversations, alleviating tedious post-call work for agents and creating coaching and training gold mines for continued success.

The Problems Addressed

High Call Volumes

High call volumes and volatility threaten customer experience standards and contact center KPIs

Long Wait Times

Customers are waiting in queues longer causing greater frustration

Limited Out of Business Hours Support

Customers are unable to solve issues outside of business hours

Overworked Agents

Agents are dealing with more repetitive cases with less time to focus on urgent cases

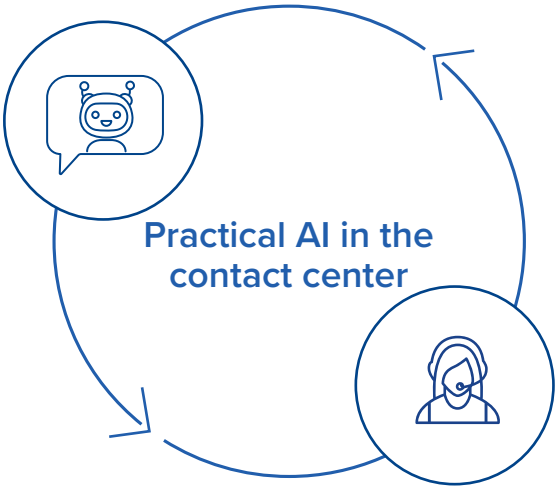
CONCLUSION

Human Support Won't Be Automated, But Enhanced

While AI in the contact center is not a new concept, it's often viewed with trepidation as a force coming to replace human agents entirely. The truth is that AI is an incredible and rapidly evolving technology, but an agent-less future is nowhere near on the horizon.

Practical applications of AI in the contact center at this point are here to assist and enhance agents, acting as an invisible hand guiding them toward faster resolutions and deeper, more tailored connections with customers.

It can be quickly implemented to improve agent efficiency and effectiveness, ease the burden of agent workload, and alleviate stress agents feel due to the personal nature of their work.



Practical AI provides a smooth on-ramp to CX success and a saving grace for agents.

About LiveVox

LiveVox is a next-generation contact center platform that powers more than 14 billion interactions a year. We seamlessly integrate omnichannel communications, CRM, and WFO capabilities to deliver an exceptional agent and customer experience while reducing compliance risk. Our reliable, easy-to-use technology enables effective engagement strategies on communication channels of choice to drive performance in your contact center. Our battle-tested risk mitigation and security tools help clients maximize their potential in an ever-changing business environment. With 20 years of pure cloud expertise, LiveVox is at the forefront of cloud contact center innovation. Our more than 500 global employees are headquartered in San Francisco, with offices in Atlanta; Columbus; Denver; New York City; St. Louis; Medellin, Colombia; and Bangalore, India.

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info@livevox.com | 844.207.6663 | livevox.com