



SPEECHMATICS

INDUSTRY REPORT

THE STATE OF VOICE IN THE CONTACT CENTER INDUSTRY

November 2019

www.speechmatics.com

CONTENTS

03

**EXECUTIVE
SUMMARY**

08

**METHODOLOGY AND
DEMOGRAPHICS**

05

FOREWORD

10

**CONTENT
STATISTICS**

12

KEY FINDINGS

14

**CONTACT
CENTER INDUSTRY
OVERVIEW**

23

VOICE TECHNOLOGY

24 HAVE CONTACT CENTER COMPANIES
CONSIDERED VOICE TECHNOLOGY?

26 THE ADOPTION OF VOICE TECHNOLOGY

34 HOW DO CONTACT CENTER COMPANIES
FEEL ABOUT VOICE TECHNOLOGY?

36 KEY FEATURES FOR VOICE
TECHNOLOGY COMPANIES

40 EXPECTATIONS OF VOICE

43

**FUTURE OF VOICE
TECHNOLOGY**

47

SUMMARY

EXECUTIVE SUMMARY

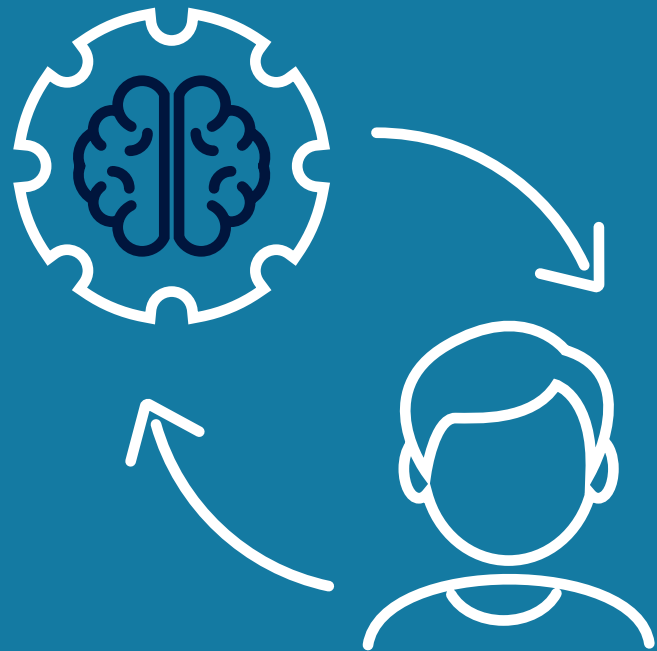
It is no secret that voice is a crucial part of the contact center industry. In recent years, however, contact centers have developed omni-channel strategies with new ways for customers to engage with them.

With these new channels come more opportunities for customers to engage with contact centers on their terms, leading to great customer experience. Email, social media, instant messaging, text-based bots, new and improved ways of interacting through the website – it has never been easier for customers to find the information they require, without even having to interact with a person.

These omni-channel innovations mean that contact center agents can engage with customers on a level that is more in line with how customers interact with each other. Their focus is text-based. Where voice was once the sole channel of communication, end-users can now communicate with contact centers however and whenever they desire. This shift from voice to text, however, comes with its downfalls. Speech and voice still contain the richest sources of data and while an omni-channel approach might offer flexibility, end-users are still leveraging voice and human-to-human communication to ensure they get a personalized experience.



Contact centers are adopting new AI-driven technology to leverage the information held within voice.



Contact centers are adopting new AI-driven technology to leverage the information held within voice. This information is then used to improve the customer experience and enhance the quality of their services through regulatory compliance. Information derived from voice can be used to support and augment agents' engagement and workload and to deliver a deeper level of understanding about the product, service and customer, ultimately reducing cost and churn.

This report will explore the state of voice in the contact center industry. It contains key insights from contact center professionals who reveal how voice technology is used to deliver high quality, highly accurate solutions which deliver better customer-centric outcomes while enhancing operational efficiencies, reducing customer churn and ultimately cutting costs.

The opinions of speech technology providers will be given and the value it offers explored, including the level of adoption, the motivations for its inclusion into the contact center solution and the key elements it must provide to make good on the promises that it offers.

The report also looks into the value and benefits that speech technology brings to contact centers as well as the drivers and motivations behind its adoption. The report will explore the challenges of adopting the technology and key elements that it must deliver to provide value to contact centers.

FOREWORD

ALIGNING VOICE WITH OMNI-CHANNEL STRATEGIES

The contact center industry has undergone enormous change over the past 5-10 years. One of the largest changes has been the adoption of omni-channel strategies. In recent years, this has seen a huge increase in popularity within contact centers. Almost every website or interface with a brand, product or service now has a bot to run automated tasks by taking text-based inputs and delivering answers to questions. As well as bots, contact centers are using email, social media and many other text-based methods for interacting with customers. With this constant stream of text, contact centers can capture rich amounts of data through these channels.

Collecting customer interactions in a text format enable contact centers to quickly and efficiently examine the data and extract certain elements to enhance their service offering. Customer interactions over the phone, however, has presented a different challenge to contact centers for many reasons. Firstly,

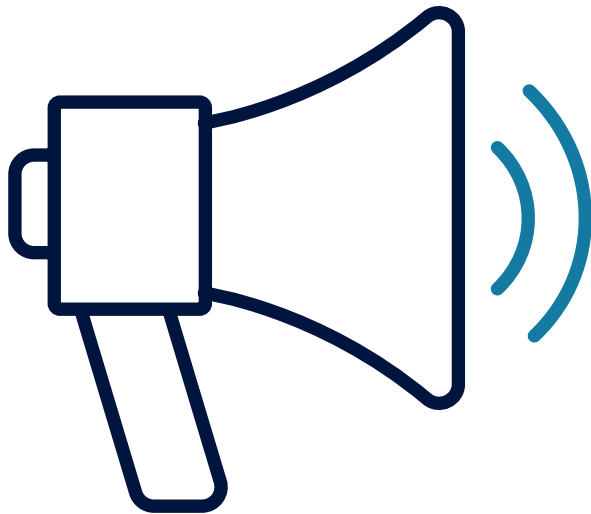
audio files are significantly larger than text files. With thousands of calls happening in parallel within the contact center, this provides significant storage implications. Secondly, it is neither quick nor easy to extract information from audio files. Audio files are often stored and forgotten about, especially now that contact centers also have rich streams of information coming in as text from their omni-channel approach. With so much voice data available but not yet being used, it is not enough to just record conversations anymore. More intelligent systems are required to transform audio files into text. That's where voice technology comes in.

Voice technology is increasingly being used to transform calls and the richness of information within them into a valuable text asset. Contact centers can then combine this insight with other sources of information derived from the omni-channel approach to deliver a holistic view of the customer and deliver significant value to end-users, agents and the wider organization.

The contact center industry has undergone enormous change over the past 5-10 YEARS

IT'S ALL ABOUT THE CUSTOMER VOICE

With increased demand from customers comes a requirement for contact centers to improve their service. A key objective for contact centers is, therefore, to maintain revenues by reducing customer churn. To do this effectively, contact centers are beginning to put significantly more time and resource into training agents to do their jobs better and improve the customer experience. Agents have become a contact centers' greatest asset, and so empowering them to do their jobs more effectively is key to business success. To ensure return on investment, contact centers are motivated to retain their highly trained workforce.



With the increase in power of technology and intelligent systems, many people are concerned that they will lose their jobs to this new capability. People believe that machines will have the ability to do the jobs of a human more efficiently and at a lower cost. While in some cases this is true, the ability for human agents to offload mundane and simple jobs to machine counterparts enables them to focus on the higher-skilled tasks that can only be performed by a human. Offloading these high volume, low skill tasks has the potential to improve employee satisfaction and reduce the frustration of these highly skilled agents. In essence, it enables them to add more value where only they can.

Contact centers are looking to voice technology to unlock previously untouched voice data from calls to provide agents with the training opportunities they require. Transcripts can be used to identify how issues have been solved in the past to improve the customer journey and reduce interaction time. By obtaining transcripts of calls, contact centers can easily access data and use it for compliance auditing, to accelerate dispute resolutions, and ultimately achieve a better customer experience.

VOICE IS ENABLING EFFICIENT OPERATIONS

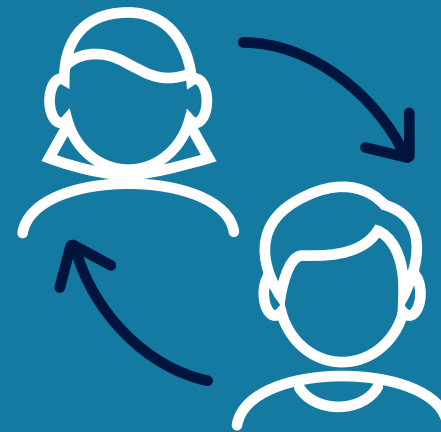
It's not just agents who are benefitting from the adoption of voice technology, but the wider business too. Compliance has become a significant challenge for the contact center. The consequences of not conforming to strict legislation such as protecting credit card data (PCI DSS compliance) and protecting customer data (data protection act), holds significant penalties. Contact centers are therefore motivated to ensure that these rules are not only followed but that they can also prove their compliance in the case of an audit. Unlike text, it is extremely challenging and time consuming to extract useful information from audio recordings. Voice technology provides the opportunity to easily locate and replay stored recordings automatically. Contact centers can evaluate and then categorize every customer interaction into groups that are relevant to specific compliance regulations.

THE ROLE OF TECHNOLOGY

Technologies have evolved rapidly to address the need of the contact center. Utilizing the available technology provides value for contact centers to manage their operations and provide better customer service. It helps to deliver better insights, enhance the customer experience when interacting with agents, and ensure organizations are conforming to regulatory requirements.

The rise of artificial intelligence and machine learning has opened up opportunities for the contact center industry to leverage voice technology. This technology opens up vast quantities of data locked inside call recordings which can be used to improve key business objectives. From analytics and agent training to compliance and improving the customer experience, the technology helps contact centers to achieve competitive advantages. Organizations can enhance relationships with customers, employees and other teams within their organization which is critical to future growth.

The purpose of this report is to explore the state of voice in the contact center industry and provide insights on the true value of voice as determined by professionals within the contact center industry itself. It will address key expectations of speech providers and discuss how organizations can implement new tools to enhance their customer communications.



METHODOLOGY AND DEMOGRAPHICS

To write this industry report, Speechmatics collated data points from Owners/Executives/C-Level, Senior Management, Middle Management, Intermediate and Entry Level contact center professionals. These people work in a range of organizations within the contact center industry across the UK, Europe and the United States.

The respondents described their job roles as Team Leader/Manager/Supervisors, Call Center Managers, Operational Managers, Partnership Managers, Contact Center Vendors, Marketers, Trainers, Product Managers, Technical Leads and Software Developers. The respondent pool included a wide range of organizations who operate within the contact center industry including, IVR, call transcription, knowledge base, agent training, analytics, quality assurance and compliance.

The collated data encompasses a range of organizations, from large enterprises to smaller startups. 23% of organizations surveyed employs over 1000 people, 2% employs 501-1000 people, 5% employ 251-500 people, with the remaining 70% employing less than 250 people.

85% of these organizations are business-to-business, 9% are business-to-consumer and 6% a combination of the two.

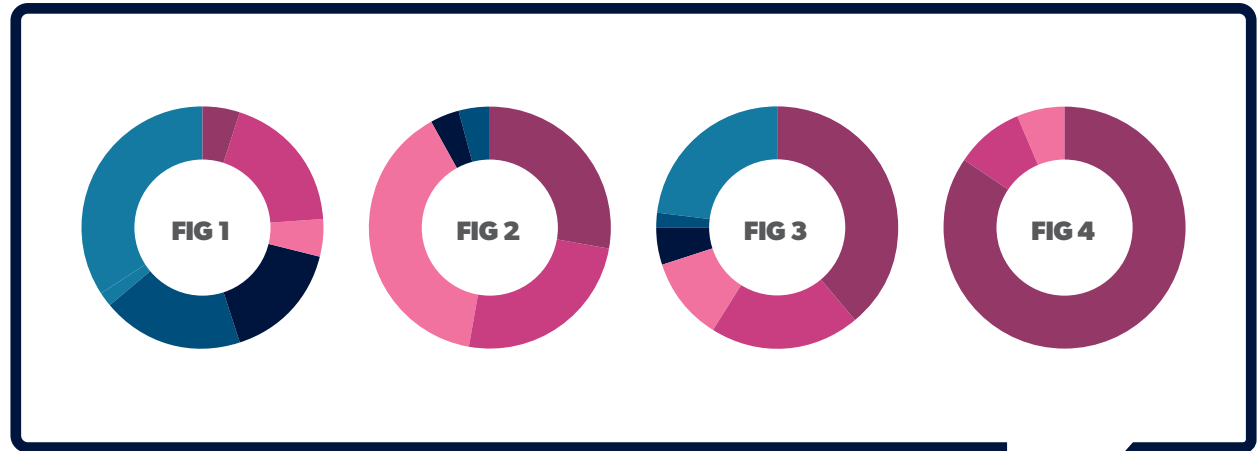


FIG 1. RESPONDENTS DESCRIPTION OF JOB ROLE

- 5% Technical Lead
- 19% Team Leader/Management
- 5% Call Center Manager
- 16% Operational Manager
- 19% Partnerships
- 2% Unified Communications
- 34% Other¹

FIG 2. ORGANIZATION TYPE IN WHICH RESPONDENT POOL OPERATE

- 28% Senior Management
- 25% Owner/Executive/C-Level
- 39% Middle Management
- 4% Intermediate
- 4% Other (Senior, Senior Engineer)

FIG 3. NUMBER OF EMPLOYEES IN RESPONDENT ORGANIZATIONS

- 39% Less than 50 people
- 20% 50-100
- 11% 101-250
- 5% 251-500
- 2% 501-1,000
- 23% 1,000+

FIG 4. TYPE OF BUSINESS

- 82% B2B
- 9% B2C
- 6% Mixture



¹ (Consultant, Contact Center Software Vendor x2, Hardware Engineer, Marketing x2, Copywriter, Sales x2, Trainer, Product Manager, Software Developer)

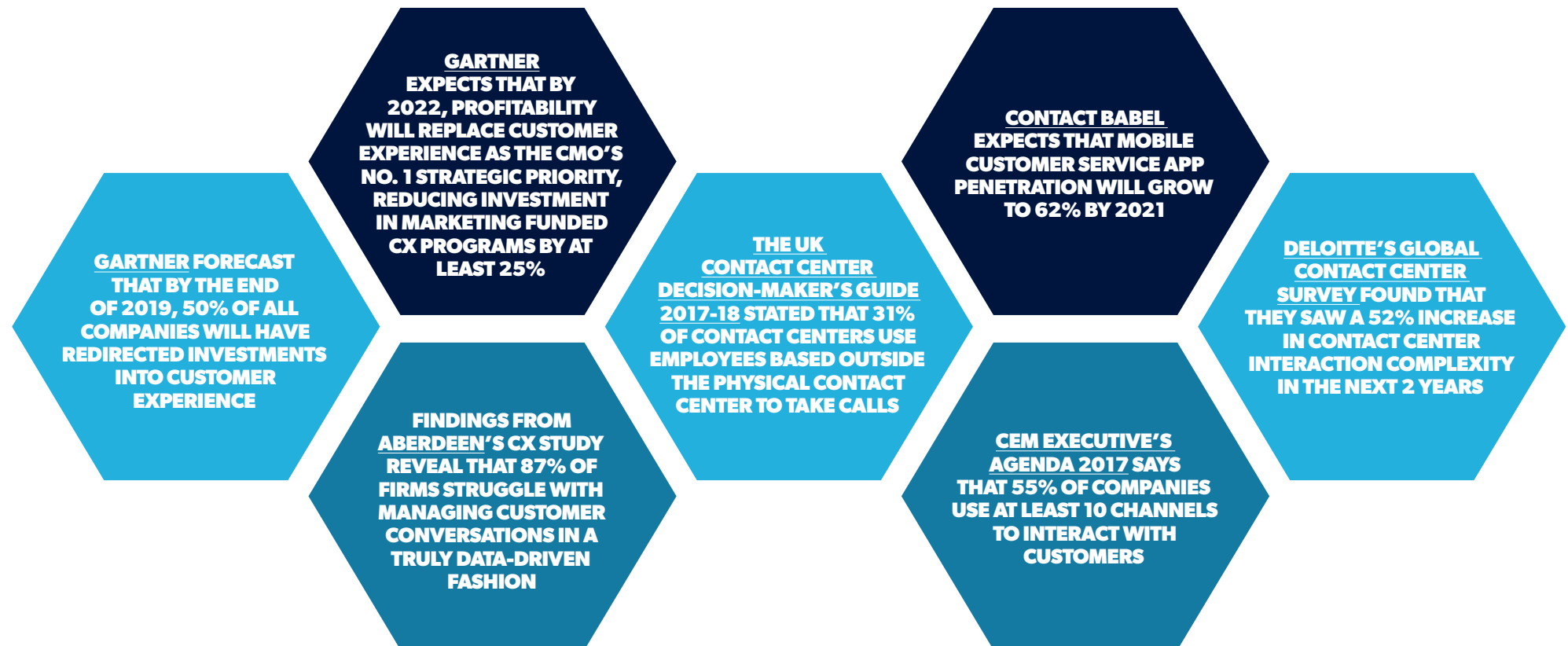
CONTENT STATISTICS

The contact center industry is hugely diverse, operating across many industry verticals. They act as the front line for end-users looking to engage with a company, brand or service from which they require assistance, support or information.

While contact center agents may not be perceived as the face of an organization, they are certainly the voice, at least initially. Because of this, contact centers are consistently under huge pressures to deliver best-in-class customer service.

The impact of not reaching this high standard is that customers leave to go to competitor solutions. Customers can now switch from provider to provider easier than ever before. Not only this, but the increased use of social media means that customers can now express frustrations to huge audiences. For this reason, contact centers look to deploy new solutions, tools and technology to empower their agents to provide a better service to their customers.

The contact center industry is constantly evolving. [UC Today](#) summed it up well with a recent story capturing some key statistics on the industry:



KEY FINDINGS

1

Contact centers adopt voice technology to **improve customer experience**.

2

91% of respondents said that capturing customers' voice data would be **valuable to their organization**.

3

95% of the contact center industry say that **data privacy matters a lot**. The remaining 5% says it matters a little.

7

82% of contact centers have either **adopted or are considering a voice strategy** in the next five years.

6

100% of contact center professionals surveyed that have adopted speech technology **have experienced a return on their investment** in some form.

5

Real-time transcription provides a lot of value for contact centers, therefore there is a demand for real-time latency.

4

Accuracy, price and speed of transcription are the most **important aspects** that a speech company should provide.

8

Voice technology is considered either **'valuable' or 'very valuable' to 78% of contact center professionals**. The remaining 22% either don't know its value or consider it to be somewhat valuable.

9

The primary focus for contact centers using voice technology includes **quality assurance, compliance, analytics, agent training and IVR**.

10

82% of contact center professionals say that **languages matter a lot** when it comes to speech technology, with Spanish and English being the most popular.

13

In the future, voice technology will continue to **improve agent performance whilst driving business and process improvements**.

12

The contact center industry predicts that voice will **enrich AI processes to offer more personalized interactions**.

11

A key challenge for contact centers adopting voice technology is that it is **too complex to deploy**.

CONTACT CENTER INDUSTRY OVERVIEW

Respondents of the survey were contact center professionals from a range of sectors, including:

- Agent training
- Analytics
- Compliance
- IVR
- Knowledge base
- Quality assurance

INTERACTIVE VOICE RESPONSE (IVR)

According to a [report from Reuters](#) the Interactive Voice Response (IVR) market is expected to witness a compound annual growth rate (CAGR) of 7% from 2017 to 2023. This is due to IVR solutions increasingly being employed by a variety of business organizations. Due to this growth, the global market is expected to reach an estimated value of \$3.7 billion by the end of 2023.

\$3.7 BILLION

Due to an expected CAGR of 7% in the IVR market between 2017 and 2023, the global IVR market is predicted to reach an estimated value of \$3.7 billion by the end of 2023.



IVR solutions are automated systems enabling callers to engage with the contact center before speaking with a human agent. Even with the development of text-based systems like chatbots on websites, social media or instant messaging, voice traffic remains high for the contact center. IVR is a way to ensure that calls are answered quickly as this remains an important point when it comes to customer satisfaction and experience. IVRs enable contact centers to route callers to relevant teams according to their specific requirements. In addition to call routing, IVRs can also transfer callers to non-human support functions for repetitive and low skill roles. For example, password resets which do not require human input.

Artificial intelligence and machine learning capabilities are transforming the way that callers can engage with the contact center. The addition of these technologies has made it increasingly easy for callers to interact with IVR solutions. Advanced voice systems also make the experience much less frustrating than it has previously been. Consumers demand positive experiences when interacting with technology and expect to be able to do so in a more natural, conversational way. Voice interfaces have become increasingly popular methods for interacting with services as demonstrated by the rapid growth of smart speakers. Sales in this area have increased by over 700% globally from 4.6 million units in 2016 to 38.5 million units in 2018, according to [Voicebot.ai](#).

700%

Increase in sales in the smart speakers market globally from 4.6 million units in 2016 to 38.5 million units in 2018, according to [Voicebot.ai](#).

Due to this, contact centers have adopted voice recognition technology as part of their IVR solution to replace their touch-tone interface with voice.

The integration of voice technology within IVRs enables reliable and highly accurate self-service tools like voice bots and synthetic agents. These intelligent systems can interact with customers in a natural, human-like way. Contact centers are adopting these systems to significantly reduce costs by transferring end-users to automated solutions for repetitive, low complexity jobs or for interactions that are compliance and security sensitive. Agents can then apply their experience to more complex and value-adding tasks. This significantly reduces staff churn rates as agents feel more challenged rather than doing repetitive and low skilled tasks. Agent longevity is a major factor in offering positive customer experiences, and so the adoption of self-service tools not only increases efficiencies and reduces cost but also helps to retain agents and offer a better service.

COMPLIANCE

[Research](#) conducted in 2019 by a contact center solution provider found that 91% of respondents believe increasing investment in contact center compliance software should be considered a priority in the next year. 83% of contact center professionals also said their organization's efforts towards customer privacy and private data safety need to be improved.

Contact centers deal with a range of customer data daily, including personal and financial details. It is the contact centers' responsibility to protect this information at every stage of the customer journey and to ensure that it is handled correctly. Failure to comply with strict regulations can result in huge penalties. From extensive fines and legal action to a damaged reputation, negative publicity and losses in revenue. With all these risks with non-compliance, contact centers are motivated to not only remain compliant in contemporary legislations but also to actively seek out any compliance-related issues, data breaches or miss-selling.

In 2018, The European Union's General Data Protection Regulation (GDPR) introduced fines for groups of companies of up to €20m or 4% of annual worldwide turnover, whichever is greater – far exceeding the previous fines. This highlights the importance for contact centers to obey these strict legislations.

Voice technology is being used by contact centers to transform the way they monitor interactions, not just between agents and customers but also conversations in trading floors and other business-to-business applications. Voice technology enables contact centers to monitor interactions without the need to listen to every call on a case by case basis. By converting both pre-recorded audio content and conversations in real-time, contact centers dramatically reduce operational and monitoring functions and the cost of delivering this through a human workforce.

The rise in machine learning and artificial intelligence takes monitoring to the next level. Contact centers now have the flexibility to apply industry or channel-specific vocabulary to a voice technology system. Additionally, for trading floor applications, keywords can be captured and analyzed to understand a deeper context of the use of the word for potential miss-selling issue cases.

\$4.3 BILLION

In an [article published by the Banker](#) they noted that in November 2014, after an investigation into foreign exchange rates, a number of regulators fined six global banks a combined \$4.3bn, with the largest fines – approximately \$1bn apiece – going to Citigroup and JPMorgan.



Automatic extraction of key data trends using voice technology can be used for compliance and to reduce operational costs through obtaining valuable business insights. Campaign evaluation, customer engagement and agent training can all benefit from acquiring these insights. Uplifting agent insight and knowledge is vital for organizations to comply with regulation and legislative compliance. It protects businesses against miss-selling by identifying areas where agents require more training to ensure correct terminology and messaging is used and to provide guidance.

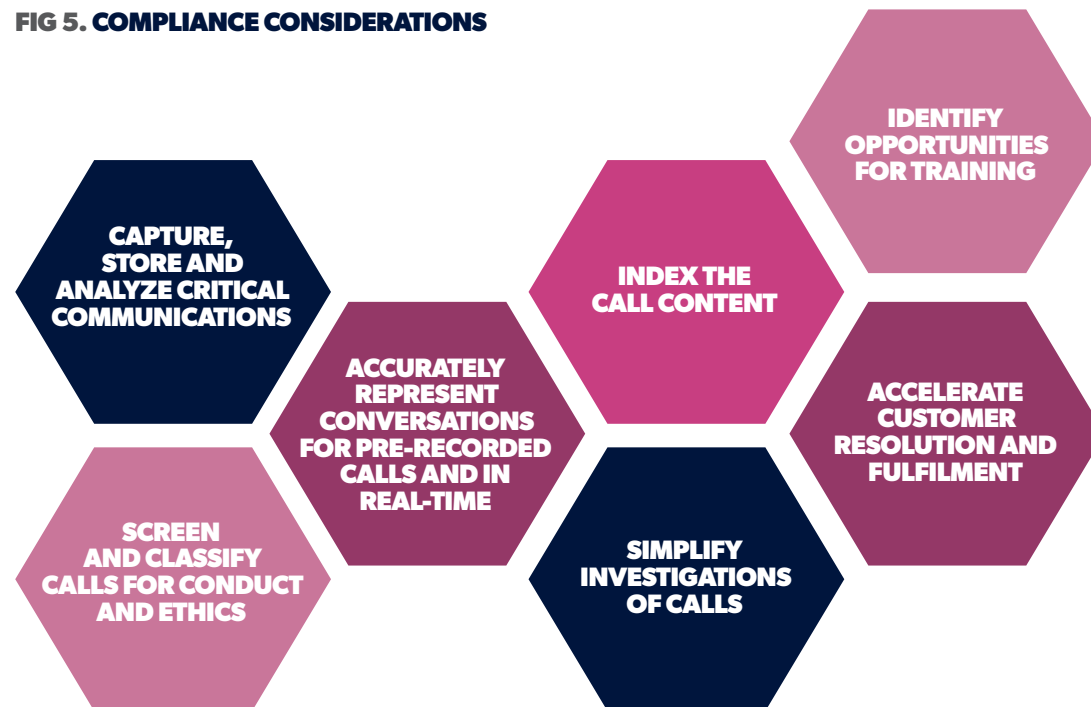
As well as the agents to wider business also benefits from the adoption of voice technology. Voice technology helps contact centers to mitigate against the challenges of compliance, helping them to remain compliant and avoid significant penalties. With the consequences of not conforming to strict legislation so costly, contact centers are highly motivated to ensure that they remain compliant at all times.

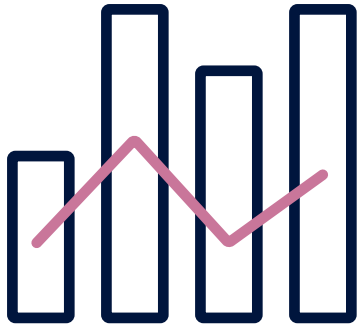
Previously, contact centers tackled compliance through a 'pause and resume' method to eliminate the capture of personal, private and payment data. However, this method relied on human activation and so had the possibility of errors. Due to this, contact centers now look to deploy more sophisticated, non-human methods of eliminating the capture of this data. Contact centers are turning to voice technology solutions to achieve this.

It is much more challenging and time consuming to extract useful information from audio recordings over text-based formats. Voice technology enables contact centers to transform their voice data into text, helping those areas within the contact center that specialize in compliance to remain on the right side of the legislation and avoid large fines. Having visibility of the data that is generated everyday is vital to ensure this.

Voice technology provides the opportunity to easily locate and replay stored recordings, ranked by relevance and displayed as text summaries with search words highlighted automatically. Contact centers can automatically evaluate and then categorize every customer interaction into groups that are relevant to specific compliance regulations.

FIG 5. COMPLIANCE CONSIDERATIONS





\$1.5 BILLION

The global contact center analytics market is expected to reach approximately \$1.52 billion by the end of 2023 with 16% CAGR during the forecast period 2017-2023.

ANALYTICS

[Market Research Future](#) published research with the expectation that the global contact center analytics market is expected to reach approximately \$1.52 billion by the end of 2023 with 16% CAGR during the forecast period 2017-2023.

As consumer demand has increased, the customer experience has become a priority for contact centers. However, improving customer experience is challenging to do efficiently. With improved customer experience comes agent empowerment. The need for analytics is essential. Contact centers are turning to voice technology to enable them to perform analytics on voice data. Transforming call recordings into a rich text format makes it easy to search for desired outcomes, to derive sentiment from the customer's voice, and to make voice data immediately accessible. Transcripts from calls not only enables analytics but makes it possible at scale.

With millions of hours of voice data captured in call recordings, speech-to-text technology makes this previously untouched data accessible at once and available at a fraction of the storage capacity. It gives contact centers the ability to access millions of hours of both recent and legacy calls, which can be used for analysis to provide training opportunities for dispute resolution, to reduce the customer call time and ultimately improve the customer experience.

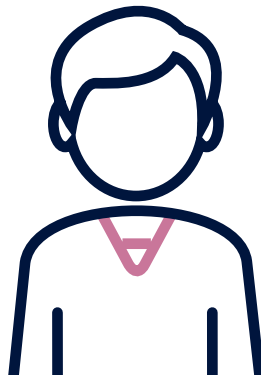
Whether it's to route the call to a specially trained agent to personalize the interaction with the caller, or to determine the sentiment of a call to empower agent responses, the need for an accurate transcription to underpin the understanding of a call is key. Speech-to-text technology provides the opportunity for analytics to improve the customer experience.

Additionally, the ability for voice technology to accurately convert calls into text enable organizations to consolidate and unify this information with data obtained from other omni-channel sources. Evaluating customer insights across all channels enables organizations to better analyze and identify areas of improvement and best practices.

“Improvements in speech analytics will go far beyond simply increasing word recognition and transcription accuracy. Our understanding of the nuances and deeper levels of human communication is still being expanded, and future solutions will go far beyond simply looking for relevant keywords or phrases, or other content-heavy words, considering all the words being used as well as the structure, pacing, flow and tone of the conversation.

“Agents, especially those with higher levels of empathy and experience, should be able to identify the emotions of the callers, so using technology for sentiment detection could seem to be an unnecessary elaboration. However, future solutions will be able to assess the sentiment and emotion of millions of calls, while analyzing the outcome of these, in order to identify in real-time situations that have a higher likelihood of a negative outcome. Being able to predict customer behavior with a good degree of accuracy and to act accordingly is a very real possibility for future users of interaction analytics.”

Scott Bakken, Cofounder and CEO at [MainTrax](#)



AGENT TRAINING

Customer expectations on quality service are continually increasing and so call center training is a critical component to deliver on these expectations. Improving performance management and [providing best practices](#) for call center agents is key to maintaining and improving customer experience.

For contact centers, agents are the first line to customers and are valued very highly. Contact centers are prioritizing providing agents with essential data both on their brand and on customers so that agents can do their jobs more effectively.

However, obtaining this data is often a challenge for contact centers. Instead, training often focuses on generalized messaging to improve the overall customer experience. Contact centers are readily adopting voice recognition technology to capture previously untouched data stored within call recordings to develop new and more personalized training opportunities based on previous interactions with customers.

Voice technology assists contact centers in easily accessing and analyzing calls by transforming them into text. Calls can then be searched for and organized based on outcomes and used to provide agents with important information. This includes issue resolution best practices to determine which responses evoke positive reactions and also opportunities for personalized responses on a customer by customer basis. Deriving rich data in a text format also enables contact centers to evaluate an agent's performance, helping to develop more personalized training objectives for each agent. All these things help to improve the customer experience for the contact center and increase the bottom line.

FIG 6. TOP 10 BEST PRACTICES FOR CONTACT CENTER AGENT TRAINING



Onboarding and training new agents have historically required significant time and effort to bring them up to speed with their workflows. Training strategies have often involved both shadowing senior team members and being shadowed to ensure that they are engaging with customers properly. Speech technology provides significant efficiencies to this process by bringing training opportunities direct to the agent's screen. This not only frees up the time of senior team members but also helps to equip agents with the information they need to offer best-in-class customer experiences.

“Knowledge management can now leverage massive amounts of data and aggregate, transform, and assess trends through analytics and AI.

“This enables a new opportunity to create task lists and notify admins when content is going out of date, when agents are not finding what they need, and when content is being abandoned.”

Sedarius Tekara Perrotta,
Head of Innovation at [Shelf](#)

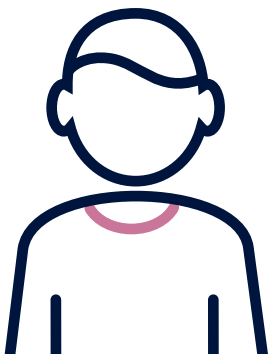
KNOWLEDGE BASE

A 2019 [market study from CCW](#) on the future of the contact center indicates that improving knowledge base is a priority for 44% of contact centers and customer experience teams. Contact centers record millions of hours of calls every year, but until recently, this data has been difficult to access and only used for special circumstances. Accessing call recordings requires specialist teams to extract data by listening to calls, making it a timely and costly process. The rise of AI and speech technology in particular, means that data is now much more accessible in text form, making it easier to store, locate and access. Voice technology opens up operational efficiencies and provides contact centers with a knowledge base from previous calls and interactions with customers.

When agents or customers need that extra bit of help, contact centers can access all the information that they require by passing recordings through a voice recognition system. Contact centers can provide agents with dispute resolution best practices by extracting topics, themes and words from customer interactions. These best practices can then be indexed to deliver best-in-class customer support.

Voice technology offers the unique capability of removing the heavy lifting from agents who can offload less skilled and time-consuming activities to automated systems. Agents can then use their training, experience and skillset to add additional value on top of the tasks performed by machines. In some cases, their workload can be offloaded entirely, allowing agents to perform tasks only executable by human agents. From an operational standpoint, this also means that the same number of agents can do more and deliver at a higher quality and with a more personalized service to the customer.

By converting calls into text, contact centers can extract key aspects of calls such as specific words used, the theme of the call and other useful artifacts to better understand the customer and improve future interactions. Interactions between agents and customers can be captured with zero effort. Advanced features such as the identification of speakers and the addition of enhanced punctuation characters, coupled with great accuracy of the voice system deliver enhanced readability for fast and accurate reading and scanning by agents in real-time call instances.



INTERACTION HISTORY

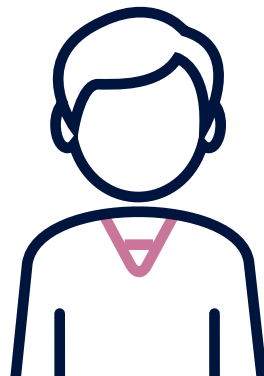
Empowering agents to do their jobs better by providing them with insightful data is a key objective for many contact center professionals to achieve improved customer experiences. Contact centers are adopting voice technology to unlock useful data captured in call recordings to enable agents to improve their customer service. The technology supports agents by delivering a transcript of calls in real-time, or from previous interactions, direct to their dashboards.

Contact centers can significantly accelerate resolution times by making customers' [interaction history accessible to agents](#). In the event of a dispute, providing agents with a transcript of the call history eliminates the requirement of the quality assurance (QA) team to filter through and locate issues in call recordings. Providing an automatic transcript of an interaction capture enables the QA team to quickly evaluate the dispute and decide on the right course of action immediately. This inevitably frees up time for the QA team to focus on providing maximum value to the dispute resolution process.

“From my bad experience dealing with an insurance company’s contact center, the ability for an agent to quickly review my interaction history would have accelerated my dispute resolution to a single exchange, saving the contact center a lot of time and money in the process. Instead, this experience took 7-weeks and was enough for me to move over to a different provider.

“By integrating speech-to-text technology into your contact center, you will have a huge opportunity to optimize the customer experience in more ways than you think possible. Your agents are at the heart of your business and so giving them the tools that they require is essential to providing world-leading customer experience. Not only this but contact centers will save lots of money through accelerating dispute resolution.”

Alex Fleming, Product Marketing Manager at Speechmatics
[Read more about Alex’s experience here](#)



VOICE TECHNOLOGY

- 24** Have contact center companies considered voice technology?
- 26** The adoption of voice technology
- 34** How do contact center companies feel about voice technology?
- 36** Key features for voice technology companies
- 40** Expectations of voice

HAVE CONTACT CENTER COMPANIES CONSIDERED VOICE TECHNOLOGY?

CONSIDERATION OF VOICE

73%

of contact center professionals surveyed have considered voice technology for their business

IS THERE VALUE IN VOICE TECHNOLOGY?

78%

of surveyed contact center professionals that have adopted speech technology find it to be either 'valuable' or 'very valuable' to their organization. The remaining 22% either don't know its value or find it somewhat valuable

IS CAPTURING CUSTOMER'S VOICE DATA VALUABLE?

91%

of respondents said that it would be valuable to capture voice data from their customers. The remaining 9% said that it would be valuable to perform analysis on that voice data and this would be beneficial to their customers

IS VOICE A PRIORITY?

82%

of contact center professionals have either considered or are currently implementing a voice strategy for their business over the next 5 years

CHALLENGES TO ADOPTING VOICE TECHNOLOGY

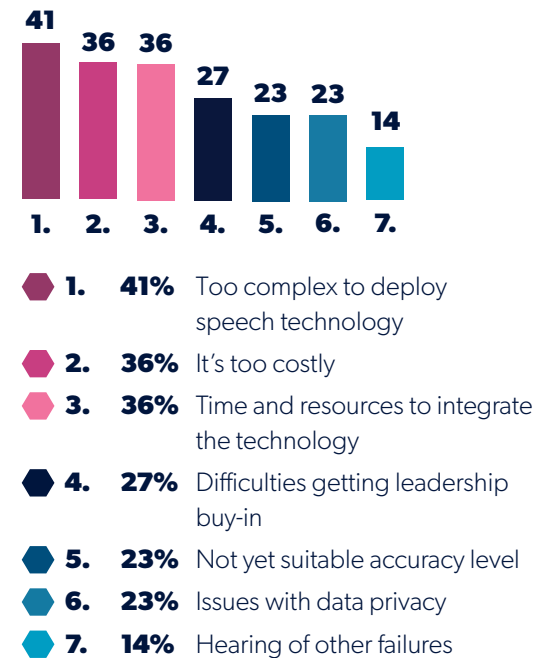
46% of contact center organizations have already integrated speech technology within their solutions as they believe it improves customer experiences (86%) and generates a significant competitive advantage (46%). A further 18% of companies said that speech technology was a priority for their business in the next 5 years, and another 18% said that they are currently considering the adoption of speech technology.

Integrating any technology into a complex solution comes with challenges and speech is no different. Contact centers find that the complexities of deploying speech technology into production are their greatest challenge to adoption (41%). Interestingly, respondents hearing of deployment failures in other companies poses a challenge to adoption, albeit just 14%. Often this failure has nothing to do with the technology but a lack of resources, no planning or no utilization strategy, all of which can be easily avoided.

Other key challenges highlighted include the cost (36%) and time and resources to integrate the technology (36%). Voice technology is usually priced on a per hour basis, and with so many concurrent streams of agent and customer interactions, this poses a real challenge. The complexity of deploying voice technology is a constant challenge and means that resources must be allocated to ensure successful integration. It also requires the speech technology provider to ensure that they have processes, procedures, documents, support and training in place to ensure that the deployment process is as easy as possible for their customers.

Although cost is a challenge for contact centers, **67% of respondents that have adopted voice technology have seen revenue growth**. This suggests that although the costs may be higher than anticipated, the value of unlocking voice data shouldn't be overlooked.

FIG 7. CHALLENGES TO ADOPTING VOICE TECHNOLOGY (%)



THE ADOPTION OF VOICE TECHNOLOGY

67%

of contact centers have seen revenue growth since adopting speech technology into their solutions

DOES VOICE TECHNOLOGY INCREASE REVENUE?

67% of contact centers have seen revenue growth since adopting speech technology into their solutions. Speech technology has been through many hype cycles in the last decade. However, a recent [report from Gartner](#) identified that speech technology is now at a point of maturity where it can offer real value and significant functionality to deliver on the promises made by the industry. For this reason and its new-found stability, accuracy and ability to be integrated within contact center solutions, it can to drive significant value in this market.

It is a challenge for contact centers to provide agents with multiple interfaces or portals to deliver new functionality. Speech technology is now being integrated by contact center solutions providers into existing products already deployed in the contact center to add a new level of capability to the agents with no additional complexity and re-training required.

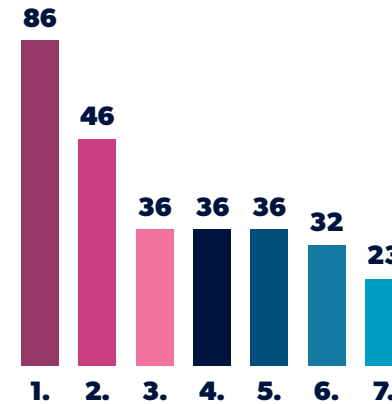
100%
of contact center companies have already seen a return on their investment since adopting voice technology

HAS THE CONTACT CENTER INDUSTRY SEEN A RETURN ON INVESTMENT?

Since adopting voice technology, 100% of contact center companies have already seen a return on their investment. Contact centers have an abundance of voice data that is often totally untapped as a resource. While the value of this voice data is known to enhance a range of business KPIs, without speech technology contact centers have struggled to unlock the value of their calls at scale without significant time, effort and cost.

The introduction of an accurate and reliable speech technology solution has empowered contact centers to utilize this new resource. Contact centers are driving new business efficiencies, delivering new and innovative products, augmenting their workforce and leveraging data-derived insight in ways that were previously impossible. Through the insight available, organizations are now optimizing their business processes, outcomes and customer service.

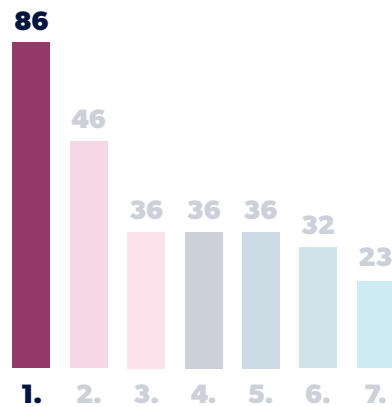
FIG 8. WHAT ARE THE BENEFITS OF VOICE TECHNOLOGY?



- 1. **86%** Improved customer experience ▶ [p. 28](#)
- 2. **46%** Creating competitive advantages ▶ [p. 30](#)
- 3. **36%** Operational efficiencies ▶ [p. 31](#)
- 4. **36%** Mitigating against fraud
- 5. **36%** Enables analytics
- 6. **32%** Efficient monitoring
- 7. **23%** Analyzing big data

1

IMPROVED CUSTOMER EXPERIENCE (%)



86% of respondents recognized customer experience as the primary benefit of adopting voice technology within the contact center. Agents often represent the first interaction between a customer and the business. They are therefore under increasing amounts of pressure to ensure that customers receive the best service possible. The ramifications of bad customer experience have a direct impact on the bottom line. With organizations making it easier to onboard new customers it's never been more important to ensure there are no reasons for customers to churn.

These days, the availability of social media to convey the displeasure of a poor experience is also a consideration for the contact center. For this reason, the impact of poor customer service can impact not just a single customer but potentially a much wider group.

[Research from cloud-based contact center solution provider Magnetic North](#) revealed that 71% of consumers would consider moving to a competitor if they had to repeat their query to multiple contact center agents. They also found that 32% of consumers would go to a competitor immediately if the business did not meet their expectations for a response time to a query. The impact of this poor customer experience costs UK brands £234 billion a year in lost sales, according to Magnetic North.

71%
of consumers would consider moving to a competitor if they had to repeat their query to multiple contact center agents

Voice technology has the potential to make a real difference to the customer experience, in turn increasing revenues and reducing churn. Transforming the customer voice into actionable insights enables the contact center to innovate through the ability to add new tools to their solution to uplift engagement. Some examples of how the customer voice can be used to improve customer experiences include:

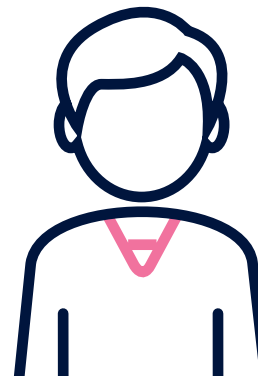
- Adding transcription facilitates voice enabled IVR solutions. Callers can interact with IVRs to accelerate their customer interaction journey without the need to navigate complex dual-tone multi-frequency signaling (DTMF) trees.
- Having interactions as transcripts at the agent's fingertips enables information to be easily accessed in an issue and resolution scenario. Rather than listening to entire audio recordings, having information as text enables agents to easily search for and solve the issue at accelerated timelines.

To deliver best-in-class customer experiences, agents need to be appropriately equipped to do so. Voice technology delivers the ability to transform voice data into a text-based format to enrich a range of tools within the contact center. Storing this data gives contact centers a rich knowledge base to give agents the latest information to pull from. Best practices and other information can then be triggered through the recognition of words within a call.

A [report by Grand View Research](#) revealed that demand for contact center software and services in the retail segment is driven by the rising need among organizations to ensure customer satisfaction and overcome challenges involved in customer retention processes. This demonstrates that the need to uplift customer experience is a key motivator for deploying new solutions and capabilities which speech technology can deliver.

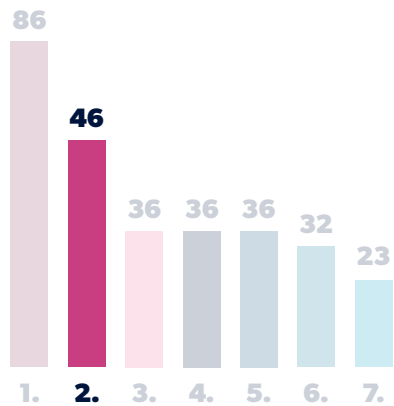
“Speech-to-text has enabled us to invest 100% of our effort into the focus of our core technology, which is the platform for language and emotion understanding, helping our customers communicate more clearly and effectively using their spoken language skills. We have helped companies improve their customer experience and also increase their revenue by offering them unique bespoke training recommendations that are easy to follow.”

Dr Danica Damljanovic, CEO and Founder at [Sentient Machines](#)



2

CREATING COMPETITIVE ADVANTAGES
(%)



The contact center is a hub of innovation, with new products and solutions striving to uplift customer and agent experiences while optimizing business efficiencies to generate ROI. 46% of contact center professionals said that a key benefit of adopting voice technology was to create competitive advantages for them to differentiate their offering.

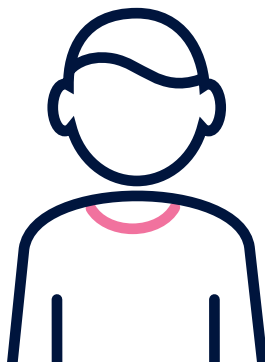
“As conversational interfaces continue to supplement and replace screen-based interfaces, speech recognition becomes increasingly important. High-quality ASR is central to any AI strategy and is one of the core building blocks of a modern contact center.”

Kevin Fredrick, Managing Partner at [OneReach.ai](https://www.onereach.ai)

Voice technology delivers the tools for contact center solution providers to differentiate their capabilities by utilizing voice. Contact centers are utilizing voice technology to provide a unique lateral language interface with solutions and to deliver a rich source of data to enhance existing product capabilities that were previously out of reach. For example, the use of speech technology in combination with AI and ML creates a data set that was previously only accessible by sifting through audio recordings and listening to entire calls. Now, contact centers can process calls at scale, providing valuable and actionable insights.

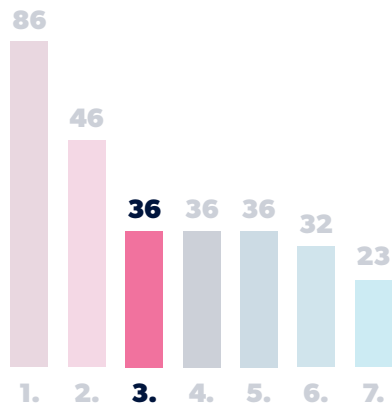
Contact center companies are adopting voice technology to benefit from being able to offer capabilities that competitors cannot, including:

- Providing rich data for agent training
- Understanding and optimizing customer interactions
- Improving business operations and processes
- Implementing voice strategies to layer on top of omni-channel processes
- Accelerate issue resolutions



3

OPERATIONAL EFFICIENCIES (%)



36% of contact center professionals said that operational efficiencies were a key benefit of adopting voice technology. Contact centers are under increased pressure to deliver best-in-class service at low costs. Having an efficient workforce that can meet the demands of customers is key to this offering. Contact centers are adopting voice technology to improve their business efficiencies. From agent training and more data for analytics to increased customer self-serve and accelerated interactions, the technology brings huge time savings for contact centers.

The benefit of adopting voice technology enables contact centers to augment their workforce. Speech technology allows contact centers to deploy sophisticated speech-enabled technology to deflect callers away from agents for high volume, low skilled tasks such as password resets. Agents are an expensive and highly valued resource within the contact center. Therefore, offloading mundane tasks that can be performed by bots, automated systems or even though delivering better FAQs means that agents can focus on issues that only humans can solve. Ensuring that the agent’s time is used efficiently for appropriate requests means that they remain challenged, fulfilled and valued. This is an important retention strategy to make sure that agents are not tempted to leave, especially after so much time and resource has been invested in their training.

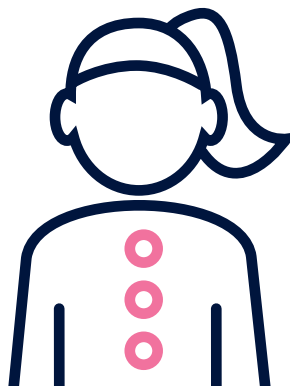
The adoption of voice technology enables organizations to process large quantities of call content faster than ever before. This is useful for several reasons, including:

- QA teams can monitor far greater volumes of text data than audio data. The ability to convert voice into a text-based format and feed it into natural language processing (NLP) analytics tools generates even more value to QA teams.
- Customer issues can be investigated more quickly by being able to easily search for specific situations in text-based content rather than audio.
- Simplified requests can be handed off to automated speech-enabled tools. This frees up agent resource to deal with a larger quantity of issues and more complex ones.
- Transcription enables after-call admin work (which can take up to 30% of agent time) to be massively reduced, delivering significant time saving to process more calls.

“Voice data is increasingly considered a strategic and highly valuable data set, the accessibility and quality of the recordings, captured metadata and automatic speech recognition (ASR) tools are critical to deriving insights from it.

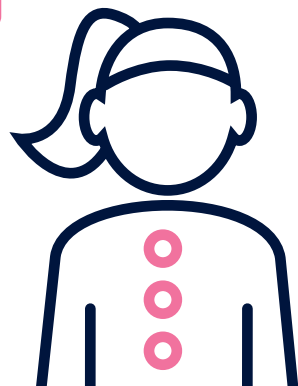
“There is huge potential for organizations to leverage voice data with high-quality audio and metadata capture from customer interactions and accurate transcripts to fuel AI. Whether it’s improving the customer experience, optimizing sales or agent performance, driving business and process improvements, fraud detection or automating surveillance, the use cases are now more pertinent than ever before.”

Nadine Edmondson, Head of Marketing at [Red Box](#)



“Artificial intelligence and machine learning suddenly make[s] voice data accessible in volume when previously it would only have been accessible by listening to individual recordings. This presents organizations with an opportunity to leverage a rich data set that can help drive true and measurable business outcomes.”

Nadine Edmondson, Head of Marketing at [Red Box](#)



WHAT ARE THE DRIVERS AND MOTIVATIONS FOR ADOPTING VOICE TECHNOLOGY?

FIG 9. KEY DRIVERS AND MOTIVATIONS FOR DEPLOYING SPEECH TECHNOLOGY INCLUDE THE FOLLOWING.



HOW DO CONTACT CENTER COMPANIES FEEL ABOUT VOICE TECHNOLOGY?

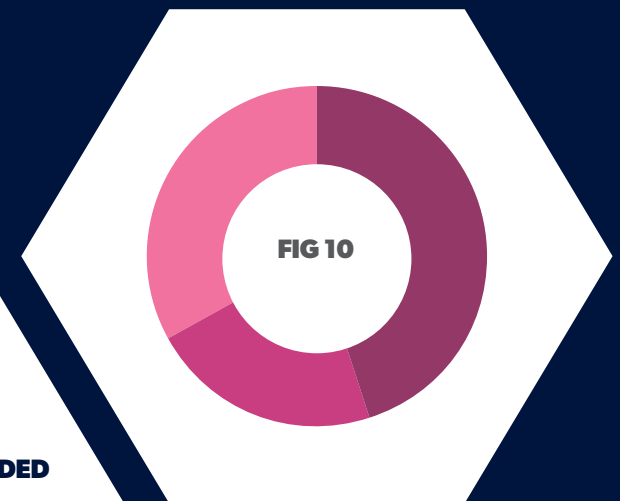
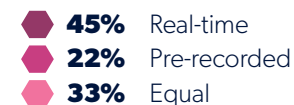
THE VALUE OF REAL-TIME VS PRE-RECORDED

Contact center professionals indicate that **real-time use of speech recognition provides more value (45%)** than pre-recorded (22%), with 33% of respondents identifying both to be equally valuable to their companies. While real-time provides the most value, pre-recorded shouldn't be overlooked as both generate efficiency savings and competitive advantages.

Contact centers have huge volumes of call data. We are all used to the automated message "your call is being recorded for compliance and training purposes" at the start of any interaction. These calls represent a significant data collection opportunity for the contact center to better understand their employees, customers, best practices in resolving complex issues and many other variables that might be important to contact centers.

In audio formats, this data is almost impossible to extract any value from without listening to every call. This is simply not cost-effective or scalable. Through utilizing voice technology, contact centers can transform huge archives of recorded calls into tangible data points to inform and optimize their businesses.

FIG 10. THE VALUE OF REAL-TIME VS PRE-RECORDED



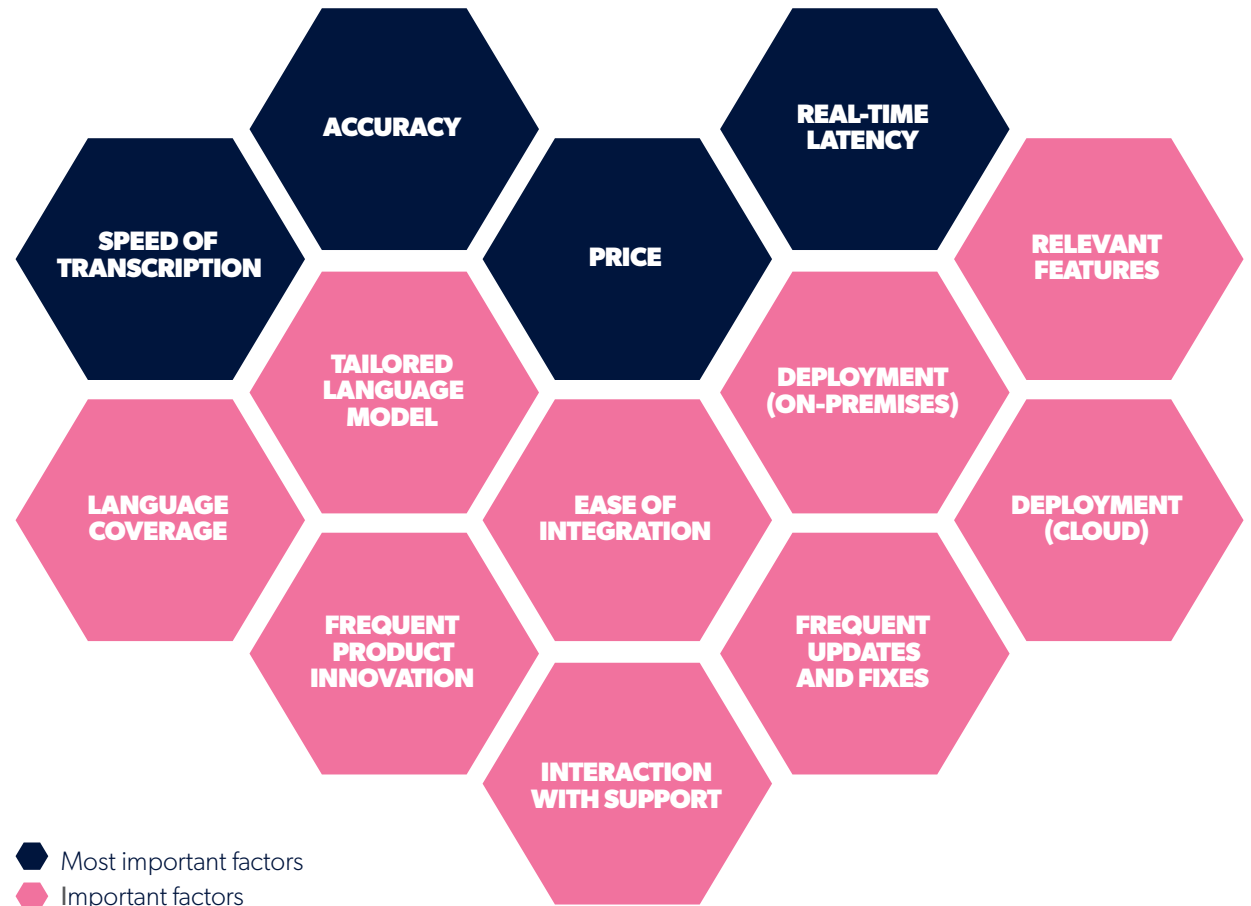
IMPORTANT ASPECTS OF VOICE TECHNOLOGY

According to the contact center industry, the accuracy of speech technology is the most important aspect to consider when choosing a provider.

While accuracy was the most important consideration for voice technology with 82% of votes, several other factors were also considered. Unsurprisingly, when comparing speech technology providers, price and speed of transcription output were also important considerations. For contact centers, price is a key consideration due to the number of concurrent streams operating at any one time. Amongst the list was real-time latency, relevant features, deployment flexibility (on-premises), language coverage and ease of integration.

With accuracy being the number one consideration, it's important to understand what this term actually means when it comes to speech technology. It is one of the most contested questions in the speech-to-text industry at the moment and as such, we've researched what accuracy **really** means for the contact center industry.

FIG 11. MOST IMPORTANT ASPECTS OF VOICE TECHNOLOGY TO THE CONTACT CENTER INDUSTRY



KEY FEATURES FOR VOICE TECHNOLOGY COMPANIES

VOICE TECHNOLOGY ACCURACY

With **accuracy occupying either the first or second most important consideration** for speech technology by 100% of respondents, it's clear that it's a critical component. But what does accuracy really mean? From an academic standpoint, word error rate (WER) has historically been how people measure the accuracy of speech technology, but with the increased use of speech technology in the real world, respondents now include more factors in their definition of 'accuracy'.

We asked the contact center industry what accuracy meant to them, the results are shown in Fig 12.

Whilst correct words were important with 86% of people voting it as their definition of accuracy, other factors also contribute towards transcription accuracy and these vary between use cases. The contact center industry indicated that domain-specific terminology, speaker identification, formatting, timing of words and punctuation all help to make transcripts more readable and therefore contribute towards the overall accuracy of their output.



DOES DATA PRIVACY REALLY MATTER?

Not surprisingly, **95% of the contact center industry consider data privacy to matter a lot, with 0 respondents saying that it doesn't matter.** The other 5% says that it matters a little. Adhering to existing and new industry compliance and regulations is essential. The main concern for contact centers is the security of personal data, especially with the recent increase in concern about voice data.

[Research from Market Watch](#) indicates that globally, the cloud-based contact center market is expected to grow from USD 6.47 billion in 2017 to USD 24.11 billion by 2023, at a CAGR of 25% during the forecast period. Cloud-based solutions that are easy to integrate deliver the benefits of offloading maintenance and management dependencies from the contact center through managed services. However, other considerations need to be made to understand the transit of data across the public internet and the visibility that 3rd party providers have over customer data.

Because the insights held in this data can now be accessed easily through speech technology, being able to capture, store and use voice data is now more valuable than ever. Contact center companies understand the importance of insights within voice data and often use on-premises deployment options to not only provide lower latency when transcribing in real-time but also to ensure the security of data.

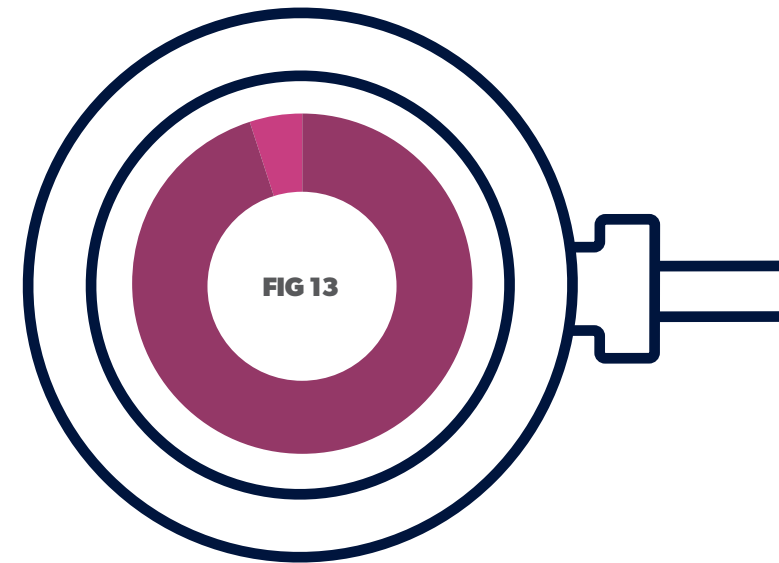


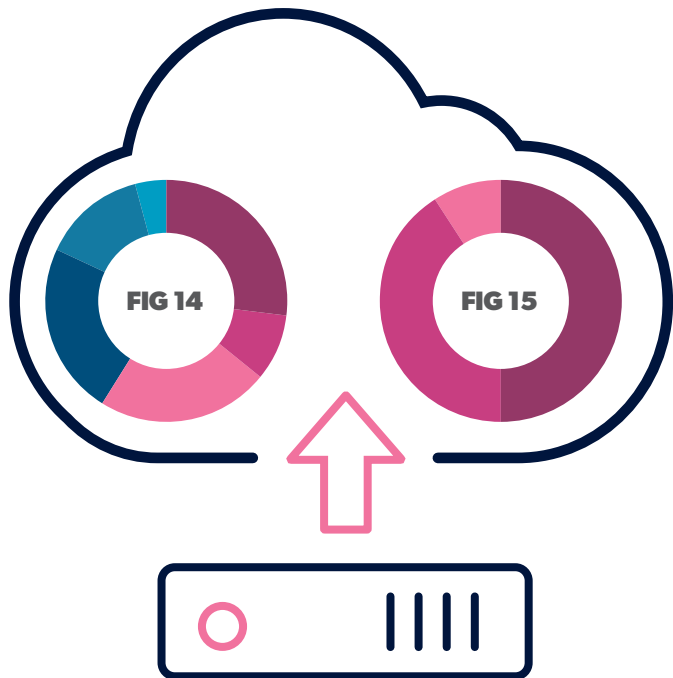
FIG 13. DOES DATA PRIVACY REALLY MATTER?

- 95%** A lot
- 5%** A little
- 0%** It doesn't matter

DEPLOYMENT PREFERENCES

To dive deeper into data security, we asked the contact center industry what most reflects their deployment preference.

As shown by the results in Fig 14, 27% of the contact center industry would prefer nothing to leave their networks. This is not surprising considering how many people value data privacy as very important to their organizations. An on-premises deployment option is therefore extremely appealing for the contact center industry.



EASE OF INTEGRATION

We asked professionals from the contact center industry how much help they required to integrate voice technology into their solution.

The results are shown in Fig 15 below.

Ease of integration was exposed as the fifth most important consideration when adopting speech technology for the contact center market. A product that is easy to integrate into an existing solution is essential, especially for cases where the solution consists of many unique products layering functionality to deliver a final solution.

FIG 14. DEPLOYMENT PREFERENCES

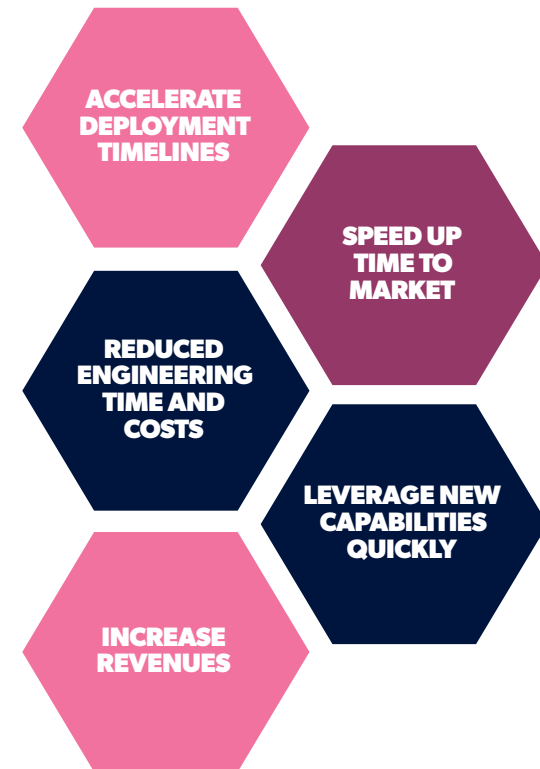
- 27% Connect to internet but nothing to leave the network
- 9% Use central facility operated by 3rd party but must be single-tenant
- 23% Can use public shared multi-tenant offerings
- 0% Privacy is not a requirement
- 23% Must be totally self-contained
- 14% Don't know
- 4% Other (based on customer preference)

FIG 15. EASE OF INTEGRATION

- 50% Minimal – have own team in-house
- 41% Some assistance – can use APIs
- 9% Fair amount

Professionals in the contact center industry indicated that their companies have either specialist knowledge or in-house teams to help integrate technologies like speech-to-text into their solutions. Although they have this capability, an easy to integrate solution is valuable for build efficiency and accelerated time to market. It enables specialist teams to focus on other value-adding tasks.

FIG 16. KEY BENEFITS OF EASY INTEGRATION



LANGUAGE CAPABILITIES

Languages are **considered very important for 82% of contact center companies**. Contact centers regularly interact with international companies and customers from across the globe, and so this is no surprise. The ability for speech companies to provide tailored language models and a wide language coverage was highlighted as a key benefit.

The most important languages identified are European languages with 64% of respondents calling these out. Specifically, the most important are shown in Fig 17 below.

Other languages identified included, Mandarin, Japanese, Dutch, German, Italian, Portuguese and Polish, amongst others.

As some of the most widely spoken languages in the world, it is no surprise that English and Spanish were identified amongst the most popular languages. Contact center professionals also demand languages that cover a range of accents and dialects. Some contact center professionals stated the need for English language models covering UK, US, AU, NZ CA, IN and many other variants. Although having these variants is important for contact centers dealing with people from all over the world, it can be very time consuming and data-heavy to store and use all of these different language packs. An alternative approach is to use a [global language model](#) that combines accents and dialects as these significantly reduce time costs and provide greater accuracy where multiple speakers are involved.

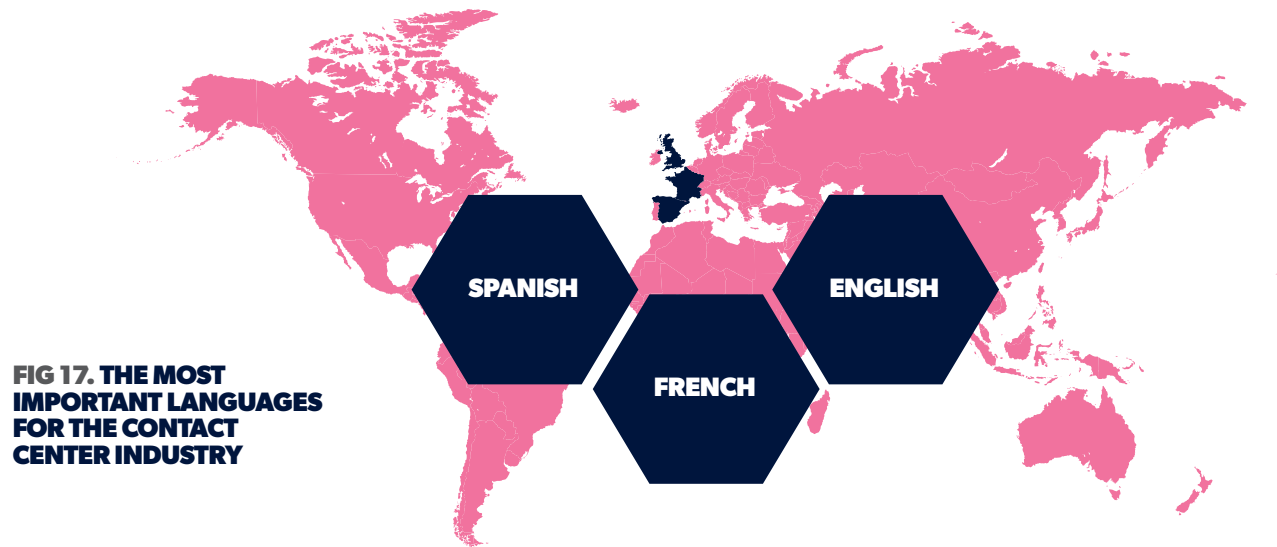


FIG 17. THE MOST IMPORTANT LANGUAGES FOR THE CONTACT CENTER INDUSTRY

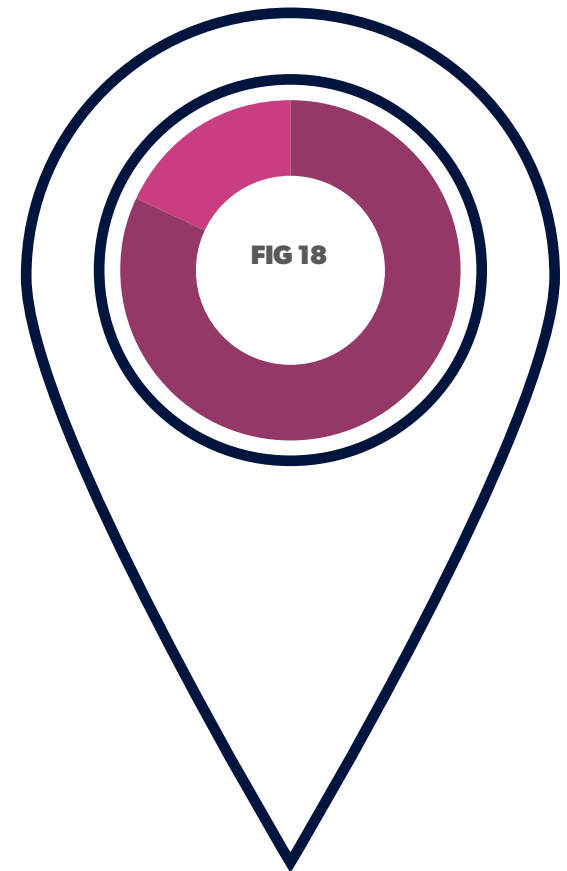


FIG 18. ARE LANGUAGE CAPABILITIES AN IMPORTANT CONSIDERATION?

- **82%** Yes
- **18%** No

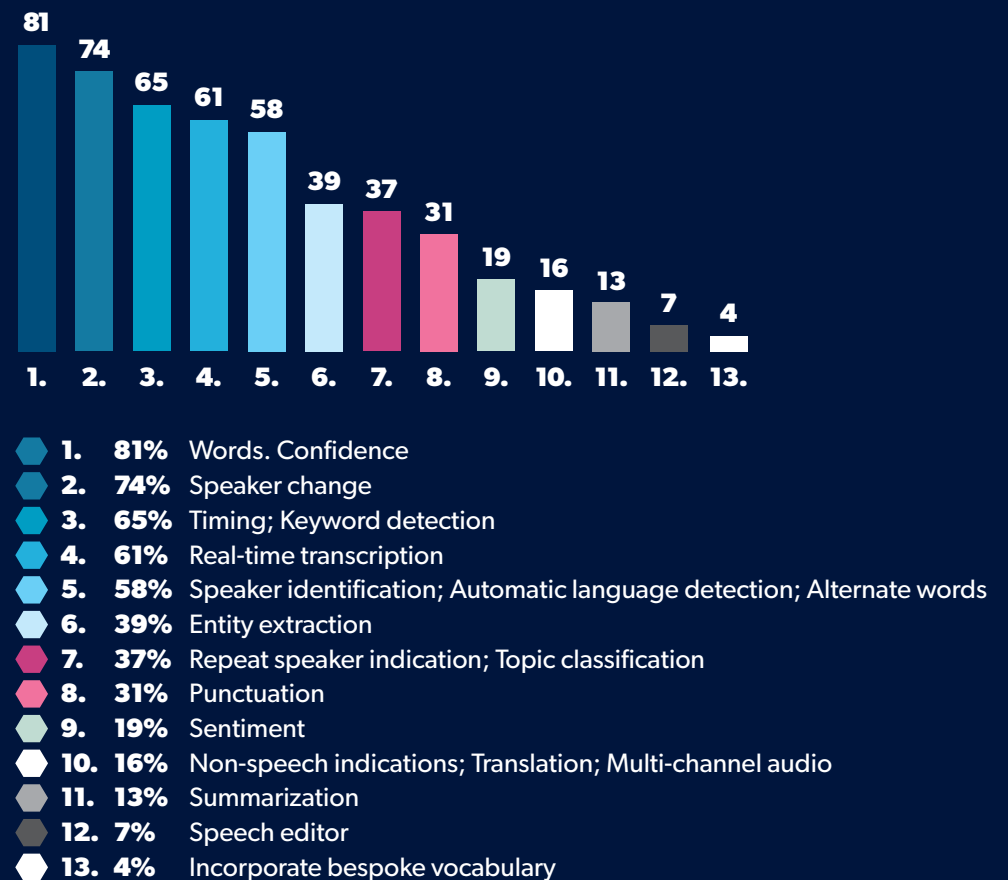
EXPECTATIONS OF VOICE

EXPECTATIONS

The contact center industry expects speech companies to provide a range of features as part of their solution. These features all contribute towards real-world usability and accuracy of transcripts.

81% of organizations expressed the number one feature that is expected in speech technology is the ability to accurately deliver words from the audio that is provided. This isn't a surprise considering that words are the core function of a speech recognition system.

FIG 19. HOW DO CONTACT CENTER COMPANIES MEASURE SPEECH TECHNOLOGY PROVIDERS? (%)



With increased pressure on regulatory compliance, it's vital for contact centers to have accurate transcripts from call recordings. Significant fines for any breaches in compliance place great importance on being able to immediately identify breaches. Voice technology not only enables contact centers to identify these breaches, but it also enables auditing of historical call recordings. Converting large amounts of audio data to text at scale and with minimal impact on human quality assurance staff presents significant value to the contact center.

61%

of contact center professionals expressed that real-time transcription is an expectation

Contact center companies also gave high importance to confidence (81%). Speaker change (74%), timing (65%) and keyword detection (65%) in all desired languages were also highlighted as the minimum expectations. These features enable better usability of transcripts within certain use cases.

With 86% of respondents saying that "improved customer experience" was a key benefit of adopting voice technology, it's clear that users are looking for more than just accurately transcribed calls. Contact centers place high importance not only on the words in a transcript but also the metadata within. Metadata helps to deliver deeper insights into the natural language elements and flow of a conversation. The ability to identify when the speaker has changed enables the formatting of interactions when transcribed. Unlike use cases where data is transcribed and fed directly into an NLP tool for analytics, contact centers expect voice providers to offer speaker change and punctuation features. These help to capture interactions verbatim and in a way that is easy to read and understand.

61% of contact center professionals expressed that real-time transcription is an expectation. Contact center interactions happen in real-time and so it isn't surprising that there is a reliance on this feature. First contact resolution is a key metric for the contact center and is directly related to the customer experience. Contact centers can now equip agents with tools that can help them facilitate and solve customer issues in real-time. Real-time voice technology is now playing a pivotal role in enabling agents to succeed in challenging issues. They are also enabling non-human tools to be deployed, meaning that some issues might never need to go to the agents.

Moreover, real-time spotting of keywords or trends within interactions can send automatic prompts to agents with relevant articles or information to better inform the caller. The identification of words is also being used to speed up interactions. For example, if a keyword is heard it can automatically signal a request for support or trigger a particular workflow.

MEASURING VOICE TECHNOLOGY

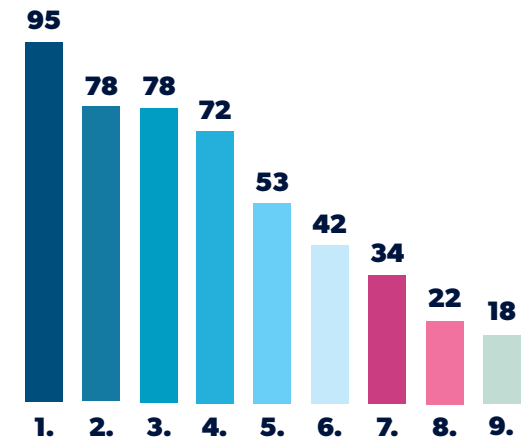
Voice technology delivers significant value for the contact center industry through greater efficiencies, improved product capabilities and delivering a competitive advantage. Companies in the industry regularly benchmark speech technology providers to ensure they are using the most accurate technology for their use case. Failure to select an appropriate provider based on a specific use case could result in significant risk to productivity, speed and quality of the end product and so this process is imperative.

When measuring speech technology providers, 95% of contact center companies consider correct words as a priority. Word error rate (WER) is the metric used for determining, roughly speaking, what percentage of the transcript contains errors, and is often used interchangeably with the term accuracy. While WER (and the correct words it measures) is undoubtedly a key component of what respondents care about, other factors help to make transcripts usable for individual use cases. Hence the definition of the word accuracy is extended to encompass more than just that.

78% of contact center companies also use turnaround time of transcript and secure deployment as key units for measurement. 72% use the number of languages as a key measure when comparing speech technology providers. Contact centers now often serve multiple countries at once so high accuracy in multiple languages is essential. The results indicate that the accuracy of the words, the speed of the output and ensuring customer data privacy are the most important factors due to the nature of the industry.

FIG 20. HOW DO CONTACT CENTER COMPANIES MEASURE SPEECH TECHNOLOGY PROVIDERS? (%)

- 1. **95%** Correct words
- 2. **78%** Turnaround time of transcript
- 3. **78%** Secure deployment
- 4. **72%** Languages
- 5. **53%** Speaker change and repeat speaker accuracy
- 6. **42%** Punctuation
- 7. **34%** Ease of use
- 8. **22%** Identification of speakers
- 9. **18%** Other



FUTURE OF VOICE TECHNOLOGY

Voice is becoming more important and will transform how customers find and interact with products.

82% of the contact center industry agreed that voice is becoming more important and will help to transform how customers interact with their products.

Today, end-users and businesses alike are using more intelligent ways of interfacing with products. The use of keyboards and physical tools are fast being replaced by voice. Intelligent interfaces are combining cutting-edge technologies like artificial intelligence and machine learning with more human-centric engagement methods like conversational voice.

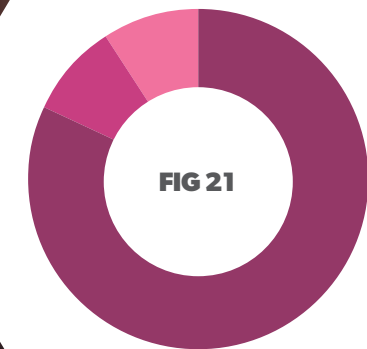


FIG 21. VOICE IS BECOMING MORE IMPORTANT AND WILL TRANSFORM HOW CUSTOMERS FIND AND INTERACT WITH PRODUCTS

- ◆ **82%** Yes
- ◆ **9%** No
- ◆ **9%** Other

Automated solutions like speech technology can assist with intelligent interactions, with improved accuracy helping to deliver better communication. New features such as punctuation and increased language capabilities uplift the usability of transcripts. With greater accuracy and usability comes greater trust from organizations. Voice technology helps to deliver more insights and relieve manual tasks from the human workforce, enabling them to add value on complex, highly skilled tasks.

With growing demand from an impatient society, customer expectations for improved efficiency are prominent. There is a debate with 9% of contact centers saying “other” as they are increasingly wanting to switch to digital channels which is clear from the recent growth in chatbots and other digital communication channels. However, voice interaction is a vital part of customer service and customer experience, so voice technology is expected to continue to grow as a vital piece of the contact center workflow. The combination of voice and text will be essential to the way contact centers communicate as businesses embrace digital transformation.

AREAS VOICE WILL HAVE THE LARGEST IMPACT ON

The **top 2** areas that voice will have the biggest impact on according to the contact center market are enriching AI processes for personalized interactions (73%) and empowering bots and automated personal assistants at work (54%).

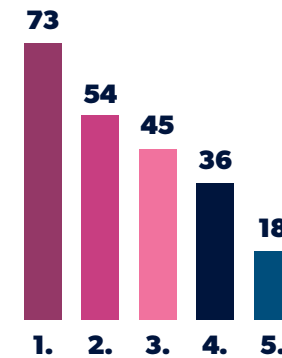
Other areas voice will impact include personal voice assistants (45%) and voice commerce (45%). As voice is the most natural form of communication, it seems only natural that we will start communicating more with assistants to enrich our lives and reduce mundane tasks. Moreover, contact center professionals predict that voice search (36%), home automation (36%), command and control (36%) and voice-enabled wearables (18%) will also be impacted positively by advances in voice technology.

Recording and transcribing calls delivers lots of value to contact center companies. Converting call recordings into text delivers flexibility to support a wide range of use cases and improve customer interactions and experiences through agent enablement.

Voice will enable enriched AI processes to help deliver more personalized experiences. To provide these experiences it not only requires an accurate transcription but also the capability to tailor voice models to include uncommon words such as names, places, acronyms and custom vocabulary. With more customer interactions comes increased

importance to deliver efficient and automatic storing and indexing of these conversations. It is vital to ensure that contact center managers can find and access the conversations they need to provide a great customer experience. Whether this is to accelerate dispute resolutions or provide information regarding compliance or simply to provide personalized customer interactions. What easier way to do all this than automatically capturing calls and transcribing them through speech-to-text software?

FIG 22. AREAS VOICE WILL HAVE THE LARGEST IMPACT ON (%)



- 1. 73%** Enrich AI processes for personalized interactions
- 2. 54%** Bots and automated personal assistants at work
- 3. 45%** Personal voice assistant; Voice commerce
- 4. 36%** Voice search; Home automation; Command and control
- 5. 18%** Voice-enabled wearables

WHAT DOES THE 2020 CONTACT CENTER INDUSTRY LANDSCAPE LOOK LIKE?

Predictions for the use of voice technology in 2020 from the contact center industry.



HOW WILL VOICE IMPACT CONTACT CENTER COMPANIES IN 2020?



SUMMARY

Voice is considered to be a critical component of the contact center. In recent years, however, contact centers have placed increased importance on an omni-channel customer interaction approach.

By utilizing social media, email, chatbots and other text-based formats, contact centers can generate rich data from customer interactions. But what about the interactions made over the phone? While voice interactions are captured through call recordings, it is difficult for contact centers to unify audio and text data, creating a data gap. It is no secret that voice is a crucial part of the contact center and it has been a challenge to leverage the richness of data within voice. Contact centers are adopting voice technology to convert call recordings into text to unlock the richness of data from the customer's voice and unify voice and omni-channel data points within the organization.

The contact center industry is no stranger to innovative technologies like voice. 73% of contact center professionals have already adopted or are considering adopting voice technology within their organizations. Not only has voice been considered, but 78% of those that have adopted a voice strategy said that it is highly valuable and a priority for their business. The rise in artificial intelligence and machine learning has given power to the benefits of voice technology like never before. The true value of voice has been realized. Contact centers are now able to augment the capabilities of their solutions to deliver new proficiencies that were previously impossible.

While there is a clear demand for voice technology adoption within the contact center, there are still some challenges and barriers to adoption. The perceived complexity of applying AI solutions to existing technology stacks is one of those challenges. A key benefit of adopting AI and ML derived technologies is to optimize employee time and to utilize their available resource. It is, therefore, understandable that contact center professionals are hesitant to adopt voice technology due to the perceived deployment complexities. This is especially the case when the contact center might already be built up of many different solutions requiring significant system integrations to ensure all systems work in harmony.

Although these are real challenges for contact centers, almost 70% of contact center professionals that have adopted voice technology in their organizations have reported revenue growth. This only highlights the value that AI and ML-powered solutions deliver.

Contact centers are now experiencing the true value of voice. Professionals in this industry highlight improving customer experience as a key metric for their success. It is no surprise, therefore, that 86% of contact center professionals said that the number one benefit of adopting voice technology is to improve customer experience. It's easy to draw parallels between improving customer experience and voice technology delivering revenue growths for contact centers. As voice technology continues to improve, contact centers are beginning to leverage voice data in a way that was previously out of reach. Contact centers now use voice technology both in real-time to aid agents on important calls, and on pre-recorded audio files to provide insights and training opportunities while improving the customer experience.



AUTHORS THOUGHTS

“46% of contact center professionals stated that a key benefit of adopting voice technology was to create competitive advantages. This is a significant statistic as it suggests that it is a key technology to differentiate one solution against its competitors. Contact centers that are adopting voice technology understand the richness of data within voice interactions and want to tap into this key data set. With the rise in AI, there has never been a better time to integrate these types of solutions into the contact center.

“The maturity of these technologies is at the core of the effectiveness of AI and machine learning solutions like voice technology. These solutions offer the perfect conditions to make fundamental and ground-breaking advancements to both the customer and the contact center itself.

“Currently, voice technology represents an important tool for contact centers to differentiate from competitors. Due to the value that voice brings to contact centers, I predict that in 2020 voice technology will move from being ‘nice to have’ to a mandatory requirement to remain relevant and keep pace with the rapidly moving contact center industry.”

Alex Fleming, Product Marketing Manager at [Speechmatics](#)

By obtaining a high-quality transcript from call recordings, contact centers are fueling natural language processing (NLP) solutions to extract insights to better understand customers, identify gaps in agent capability and to understand processes to offer more value. Transcripts also enable natural language understanding (NLU) capabilities like voice bots, synthetic agents and other non-human interfaces, to offload demand from human agents. NLU also provides secure data capturing capabilities with voice-based interfaces that conform to strict compliance requirements.

Now that the value of voice technology is understood, there is a demand for voice providers to offer world-leading capabilities. Contact centers expect the highest accuracy, competitive pricing, quick transcription and low-latency real-time capabilities. It is not enough to just convert spoken words to text. Because contact centers operate across multiple sectors in multiple countries, the ability to offer vast language coverage and transcribe industry-specific jargon is vital. Speech providers must be able to offer flexible dictionaries which can be easily adapted for individual use cases.

With increasing pressures from new data privacy regulations, it is now critical for contact centers to take data privacy seriously. With high repercussions for compliance breaches, it's no surprise that 100% of contact center professionals said that data privacy was important to them. Contact centers are turning to on-premises deployment options to ensure that all data remains in the contact center's secure environment. This delivers three distinct benefits to contact centers.

1. Data is not required to transit the public internet to a 3rd party provider where it can be compromised.
2. Caller data is completely abstracted from the voice technology provider. The transcription element sits in the contact center environment and ingests audio and outputs text to the identified location.
3. On-premises solutions come with lower latency for real-time capabilities.

There is no doubt that voice technology will impact the way people interact with contact centers in the future. Interaction formats, times, expectations and behaviors continue to change and are driven by the growing availability of voice command technology. With improvements in some voice capabilities come consumer expectations on other areas of voice. For example, if you can buy products through your smart speaker why shouldn't you be able to do something similar when calling your insurance company?

The adoption of voice technology not only enables callers to interact with contact centers in ways that suit them it also enables contact centers to deliver data-driven experiences to their customers. Voice technology delivers the ability to provide real-time insights to agents to adapt their interactions with customers while the call evolves. These personalized experiences have the potential to deliver an even deeper level of conversational interaction to not only retain customers but to turn them into true brand ambassadors.

With the increased adoption of AI and ML-driven solutions, there hasn't been a better time for contact centers to adopt voice technology to drive customer experience and deliver customer expectations.