

A Forrester Consulting  
Thought Leadership Paper  
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# AI-Infused Contact Centers Optimize Customer Experience

Develop A Road Map Now For A Cognitive  
Contact Center

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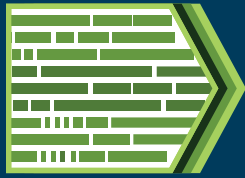
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For AI to deliver at its highest potential, organizations must carefully craft an AI strategy to optimize customer journeys, agent experience, and, ultimately, customer satisfaction.

## Executive Summary

Contact centers have long been a touchstone for organizations' customer experience (CX). As often one of the first interactions, contact centers play an integral role in shaping how customers view and interact with a brand.

But evolving customer expectations and technologies have caused organizations to rethink certain aspects of their contact centers; many have integrated cloud, omnichannel, and artificial intelligence (AI) capabilities into their approach. While omnichannel and cloud have long been more straightforward to implement, many aspects of AI remain unexplored territory. For AI to deliver at its highest potential, organizations must carefully craft an AI strategy to optimize customer journeys, agent experience, and, ultimately, customer satisfaction.

In March 2019, NICE inContact commissioned Forrester Consulting to evaluate drivers of AI adoption in contact center applications. With all the industry focus on AI enabling enhanced self-service, what gets lost is where it will lay the groundwork for the evolution to the cognitive contact center. To explore this topic, Forrester conducted an online survey with 307 contact center technology decision makers at global companies. We found that while most companies are currently implementing or planning to implement AI-infused applications to augment contact center capabilities, they experience a variety of challenges in doing so. However, the perceived benefits far outweigh the risks posed by these challenges, and firms should look beyond chatbots to get the most out of AI for their contact centers.

### KEY FINDINGS

- › **Contact centers are key to achieving business goals.** Almost all firms agree that their contact centers are instrumental in achieving their business priorities, including improving CX (98%), increasing use of data insights (87%), and improving products and services (83%).
- › **However, challenges in the contact center are detrimental to business performance.** Ninety-five percent of contact center decision makers report experiencing multiple challenges, including meeting growing customer expectations for frictionless, fast service. These challenges prevent companies from maximizing the value contact centers can deliver to the business.
- › **AI boosts contact center capabilities but requires a thoughtful road map for implementation.** Sixty-four percent of respondents say their firms are planning to increase their investments in AI for their contact centers over the next year. While the list of benefits spans customer, agent, and business benefits, companies must caution against getting caught in the hype around AI. To get the most out of their investments, companies need a concrete strategy and road map for implementing AI.

# Contact Centers Are The Cornerstone Of Customer Experience

When customers connect directly with a business, they often do so through a contact center. And how that contact center manages those frontline interactions shapes customers' experiences and impressions of that business.

To ensure those interactions deliver positive results for the business and its customers, companies need to make contact centers the foundation of their CX strategy.<sup>1</sup> CX teams and contact center leaders must collaborate closely to develop a contact center road map that integrates into the overall CX strategy and includes support for omnichannel, cloud, and artificial intelligence. Just as moving to the cloud and adding omnichannel capabilities are essential to modernizing the contact center for the digital world, adding AI is essential to elevating the customer and agent experience. An AI-infused cognitive contact center can help personalize agent/customer matching, augment agent capabilities, and offload management tasks, enabling firms to focus more on their business strategies to strengthen customer loyalty, differentiate themselves from the competition, and reduce their costs.<sup>2</sup>

While AI can boost self-service and help businesses deliver a more personalized experience, it can also create concerns over potential job loss, require additional agent training, and result in longer call handle times as agents are reserved to handle the more difficult and challenging interactions. Despite these concerns, the value that AI delivers makes it a critical component of any modern, cognitive contact center that needs to improve performance, productivity, CX, and business results.

Our study with 307 contact center technology decision makers confirms the strong correlation between contact centers and achieving business goals, including (see Figure 1):

- › **Improving customer experience.** For most industries, a large percentage of customers need support from contact center agents.<sup>3</sup> The quality of service from agents can determine the customer's loyalty, how much of their wallet they share, and the ability to attract or discourage new customers through word of mouth. Virtually all (98%) companies in our study agree that their contact centers have a significant or substantial impact on their ability to improve CX.
- › **Increasing data insights in business decisions.** Contact centers are rich with customer data. In our study, 87% of respondents believe that harnessing this data for insights would enable their companies to deliver timely and contextually relevant customer experiences, identify new revenue streams, or dynamically respond to market changes.



Most companies agree that their contact centers have a significant or substantial impact on their ability to achieve business priorities for the coming year.

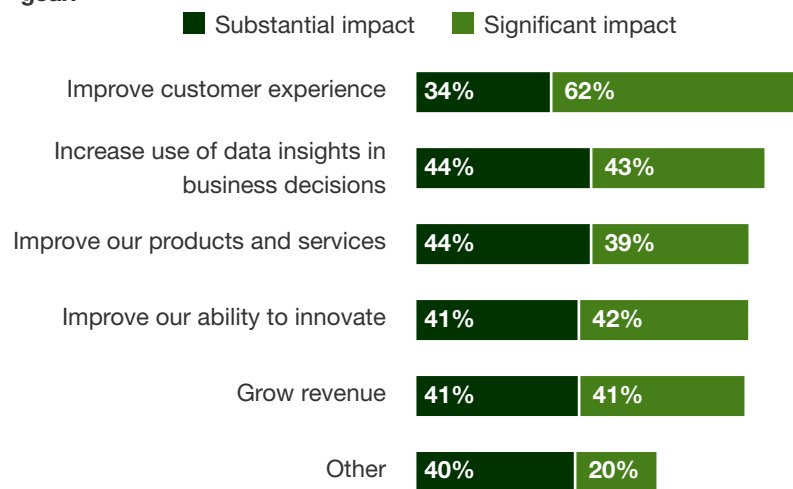
- › **Improving innovation.** Whether revolutionizing products or services, contact centers can be a wedge into innovation as a service differentiator. And 83% of respondents tell us that their contact centers have a substantial or significant impact in doing just that.
- › **Growing revenue.** Positive customer experiences drive loyalty. Firms can see their increased CX efforts translate into an enhanced bottom line.<sup>4</sup> In this study, 82% of respondents confirm that their companies' contact centers improve their ability to grow revenue.

The positive impact of the contact center on business success is well-acknowledged, but companies lack a clear strategy for maximizing the value of their contact centers.

Companies struggle to maximize the value of their contact centers.

Figure 1

“What impact does your contact center have in achieving each business goal?”



98% believe their contact centers have a significant or substantial impact on their ability to improve CX.

Base: 307 contact center technology decision makers at global companies with contact centers  
 Source: A commissioned study conducted by Forrester Consulting on behalf of NICE, March 2019

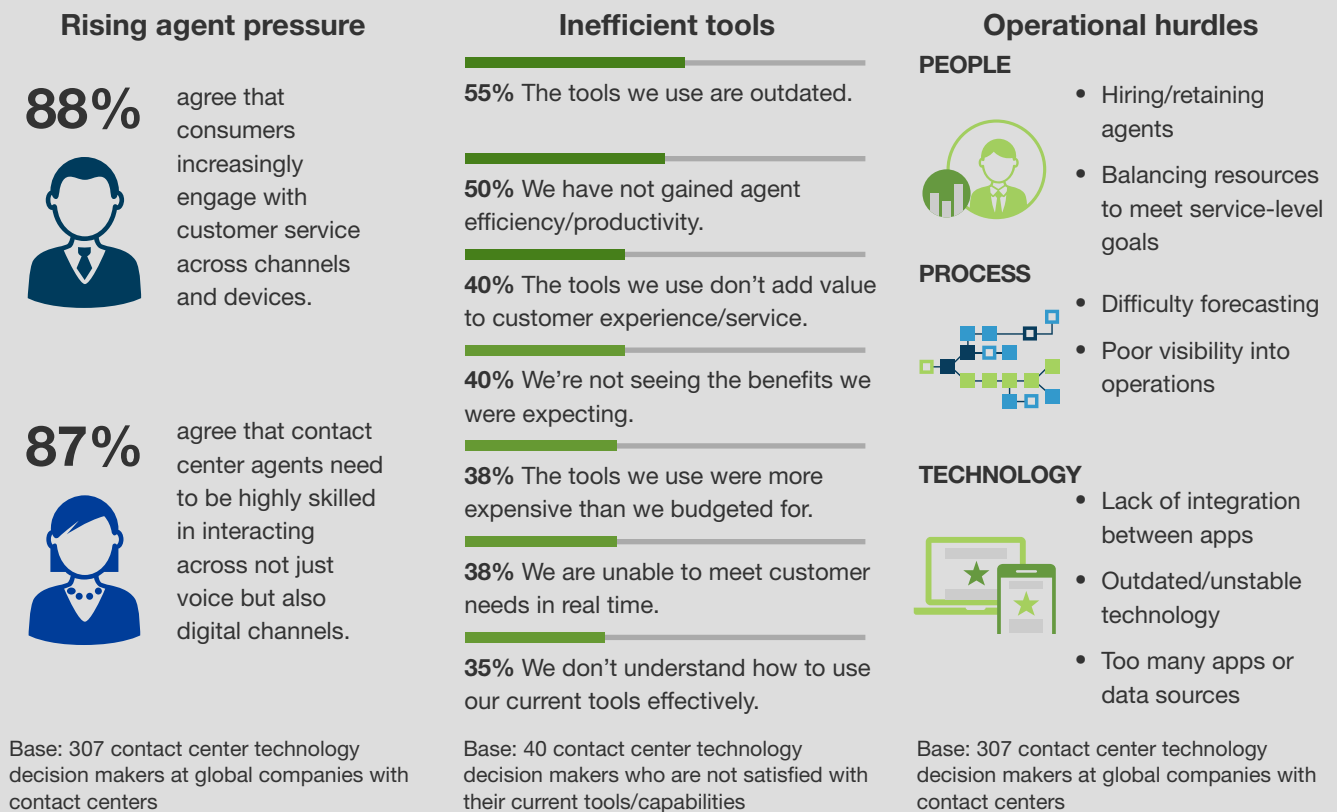
# Contact Center Challenges Hinder Business Success

Despite recognizing the contact center’s ability to deliver on business objectives, the performance of the contact center continues to decline. We found that companies grapple with (see Figure 2):

› **Rising pressure on agents.** The age of the customer has brought an avalanche of new interaction channels to serve customers how, when, and where they want. Agents not only need training on these new channels, but on any AI solutions that are deployed to augment their capabilities. The vast majority — 88% — of contact center technology decision makers in our study agree or strongly agree that consumers increasingly engage with customer service across channels and devices. With this increase in interactions and interfaces, contact center agents are left to handle snowballing requests for service from a myriad of channels.

The proliferation of service across channels demands more knowledgeable agents who can seamlessly serve customers regardless of the interaction point. To meet growing customer expectations, 87% of respondents tell us that contact center agents need to be highly skilled in interacting across not just voice but also digital channels.

Figure 2



Source: A commissioned study conducted by Forrester Consulting on behalf of NICE, March 2019

- › **Inefficient tools and capabilities.** “The contact center technology ecosystem has grown more complex as new communication channels and touchpoints have become available, making good service hard to deliver.”<sup>5</sup> Only 31% report complete satisfaction with the tools in their contact centers. The unprepared majority blame outdated tools that don’t deliver on expectations for their business, their customers, or their agents.
- › **Operational hurdles.** Regardless of firmographics, 95% of companies across the globe face challenges in the contact center with people (hiring and retaining agents, balancing resources to meet service-level goals), process (difficulty forecasting, poor visibility into operations), and technology (lack of integration between applications, outdated/unstable technology, too many applications or data sources).

As challenges in the contact center persist, they hinder companies from extending and maximizing the value contact centers can deliver to the business.

## Contact Center Leaders: Look Beyond AI Hype To Its Value-Add

Our research demonstrates that disparate and underperforming technologies adversely affect customer satisfaction and impede business success. Companies must not only modernize their contact centers, but do so in a way that protects their investments over time and that delivers the greatest qualifiable benefits. Incorporating AI into the contact center is one way to achieve these goals.

This approach is evident in our research as most companies in our study are actively planning or currently implementing AI in contact center applications to (see Figure 3):

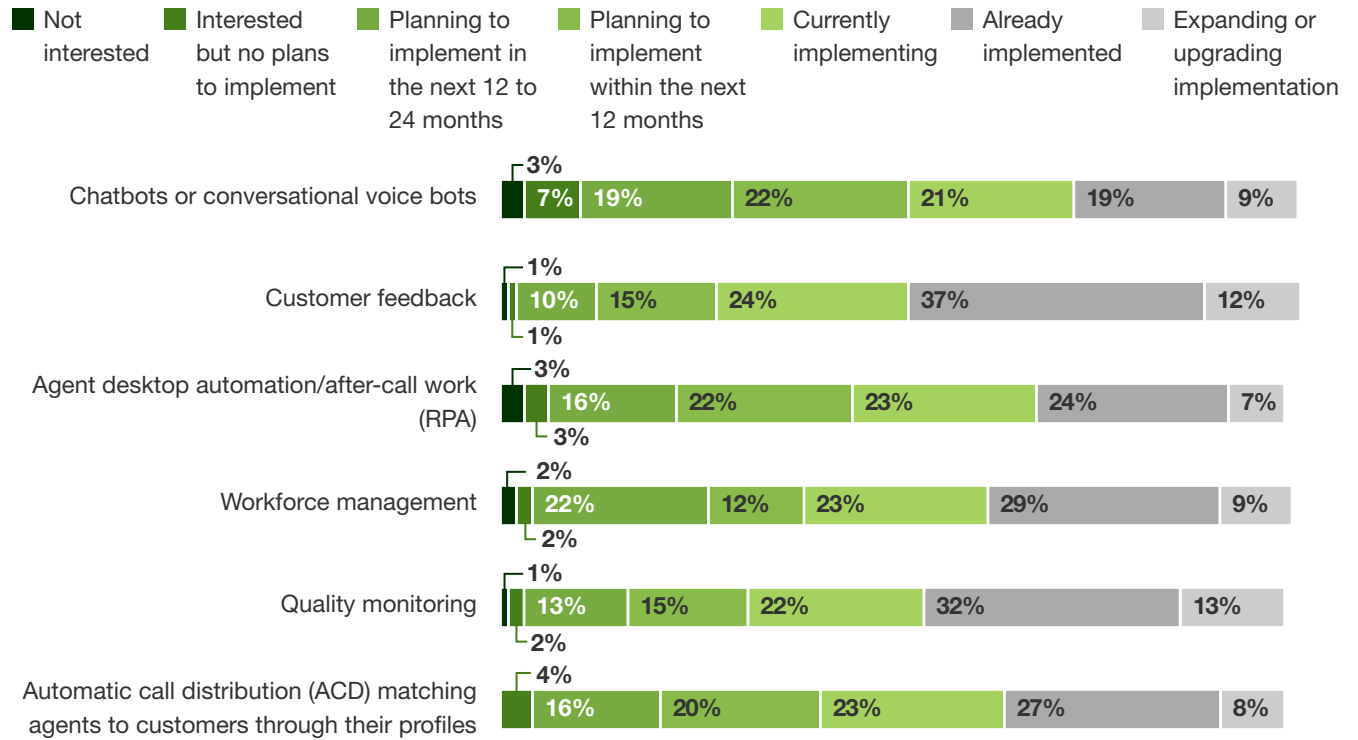
- › **Personalize agent and customer matching.** Almost 60% of contact center technology decision makers tell us their companies are planning or currently implementing automatic call distribution (ACD), matching agents to customers through their profiles to improve CX.
- › **Augment agent capabilities.** Whether it’s agent desktop automation/ after-call work (robotic process automation) or bots (chat and voice), over 60% of companies are actively planning or currently undergoing these implementations to enhance agent productivity.
- › **Augment management tasks.** To support quality assurance and workforce management teams, companies also show high activity in embedding AI in workforce management (57%), quality monitoring (50%), and customer feedback (49%) applications.

Unsurprisingly, interest in AI is strong. Companies have implemented AI to augment the capabilities of a wide range of applications, helping to address the dual challenges of productivity and customer satisfaction.

The benefits of AI are well-known. Forrester’s research has found that “AI streamlines inquiry capture and resolution. It optimizes case routing, classification, and schedule management. It extracts useful information from voice and digital conversations to quickly surface trends in issues and customer sentiment that may affect customer retention and loyalty.”<sup>6</sup>

Figure 3

“What are your company’s plans to embed artificial intelligence (AI) in each of the following contact center applications?”



Base: 307 contact center technology decision makers at global companies with contact centers  
 Source: A commissioned study conducted by Forrester Consulting on behalf of NICE, March 2019

Companies in our study realize benefits for customers, agents, and the business as a result of AI applications in the contact center. They expect AI to provide a boost by:

- › **Increasing self-service and reducing the need for agent assistance.** In our study, 80% of respondents agree that AI would help their contact centers increase agentless interactions. However, this strategy does not necessarily translate to a reduction in agent headcount. In fact, 74% of respondents tell us the number of agents in their contact centers will grow or stay the same this year. So, while AI will handle simpler, repetitive interactions, agents are still needed to manage the more complex, higher-value interactions that require advanced skills and additional time to resolve. But all is well as agents prefer to spend their time on more impactful interactions than provide repetitive service for easy issues. So ironically enough, chatbots do allow human agents to feel less like automatons.<sup>7</sup>
- › **Gaining an edge over competitors.** According to 79% of respondents, AI would enable them to have the upper hand over competitors as they deliver timely and contextually relevant customer experiences. AI also improves agents’ engagement, which translates to happier customers. And research reveals a statistical correlation between more engaged employees and revenue growth: A 5% improvement in employee engagement leads to a 3% increase in revenue.<sup>8</sup>



› **Improving customer interactions with agents.** Close to 75% believe that AI improves customer service in the contact center. Augmenting QA teams with AI allows companies more time to coach and train agents, while more sophisticated routing matches the right customer with the right agent to improve issue resolution. Forrester estimates that “companies will continue to use AI for efficiency gains and to deliver more effective experiences. AI will help monitor customer journeys and proactively engage customers at opportune times to boost revenue and conversion.”<sup>9</sup>

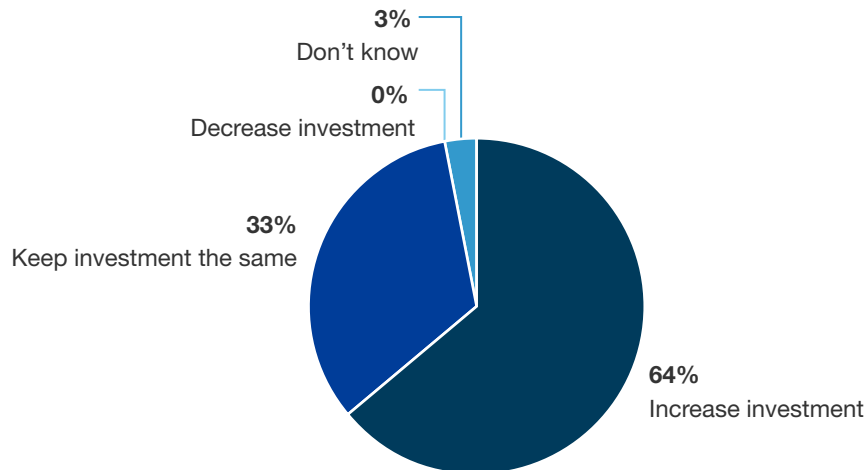
The belief in and value of AI is further highlighted by the 64% of respondents whose companies plan to increase their AI investments in the contact center in the next 12 months (see Figure 4). Moreover, our findings suggest that AI is not a “one-and-done” initiative. A pilot investment will likely lead to subsequent investments. Therefore, it’s necessary to consider the full scope for how AI can be used, and creating a road map is a smart first step.



**Companies adopt AI to address the biggest issues they face in the contact center.**

**Figure 4**

“Thinking about the next 12 months, what are your company’s investment plans to support AI in the contact center?”



Base: 290 contact center technology decision makers who currently have/are planning to implement AI  
Source: A commissioned study conducted by Forrester Consulting on behalf of NICE, March 2019

# Act Now To Lay The Groundwork For AI

Despite burgeoning interest, AI is not a shortcut to mask fundamental limitations in call center capabilities, e.g., relying on a chatbot in lieu of an interactive voice response (IVR) or full digital channel capabilities. In this study, 77% of contact center technology decision makers agree that while AI increasingly peels off simpler customer service requests, it also increases the need for agents to develop additional skills to deal with more complex and higher-value customer inquiries.

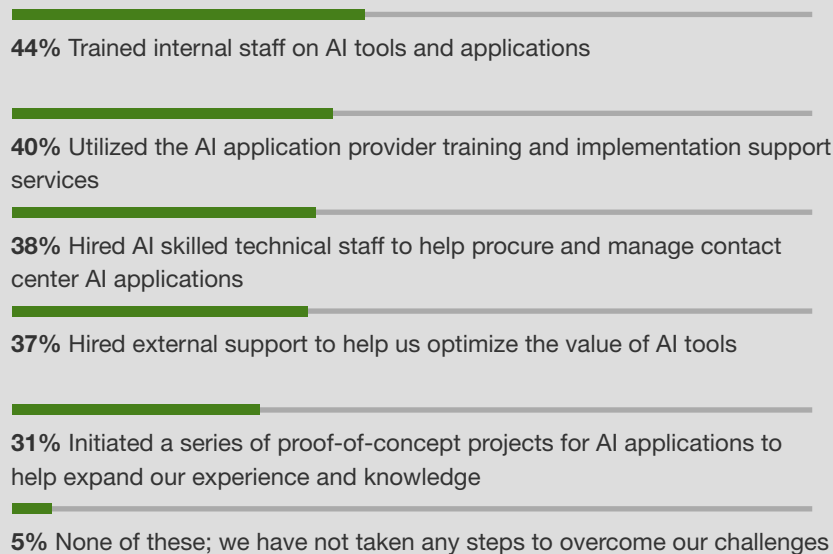
Companies can get swept up in the hype around AI by making the common mistake of solely focusing on cost reductions automation can provide. These misconceptions and lack of a more expansive view of AI constrain enterprises from optimizing their customer journeys, agent experience, and ultimately customer satisfaction.

It's no surprise that 89% of respondents experience challenges with implementing AI in the contact center. While no single challenge surfaces across the board, companies cite the lack of internal resources to groom data for AI apps, insufficient expertise to manage or utilize AI in the contact center, and difficulty finding the right AI applications or partners. To overcome AI implementation challenges, companies must seek more training, expertise, and support when implementing AI (see Figure 5). The right partner can do most of the heavy lifting.

Follow Forrester's recommendations to plan your AI road map.

**Figure 5**

**“What steps has your company taken to overcome AI implementation challenges?”**



Base: 249 contact center technology decision makers who currently have/are planning to implement AI and experience challenges with implementation  
Source: A commissioned study conducted by Forrester Consulting on behalf of NICE, March 2019

95% of companies are taking steps to overcome AI implementation challenges, primarily by seeking more training, expertise, and support.

# Key Recommendations

The path to a cognitive contact center is made up of much more than just chatbots. AI can augment not only agents in their key role of serving customers, but also quality assurance, workforce management, and business analysts looking to refine and enhance CX.

Forrester's in-depth survey of contact center technology decision makers about AI in contact center applications yielded several important recommendations:



**Take an “outside-in” approach by developing a deep understanding of customer journeys.** As baseball player and coach Yogi Berra once said, “If you don’t know where you are going, you’ll end up someplace else.” Despite the attractiveness of investing in chatbots to deflect live interactions, the better place to start with AI is comprehensive journey analytics, spanning all channels and the escalation paths from self-service to live agents. This approach will expose opportunities to boost customer satisfaction, reduce costs, and augment capacity of your contact center team.



**Ensure chatbot investments not only achieve automation goals but customer satisfaction as well.** The hard-dollar benefits of automation are always top of mind for customer service organizations as they are under constant pressure to optimize. But in addressing the customers’ desire for quick answers with self-service, contact centers need to ensure they are not sacrificing an effective and efficient customer experience.



**Empower agents with enhanced AI-enabled desktop tools that incorporate customer intent and context.** Customers dislike having to repeat themselves. AI-enabled desktop tools can help guide agents through a more effective and efficient interaction with a customer.



**Balance cost reductions with agent development and customer satisfaction.** AI will augment your quality assurance team’s ability to coach, train, and develop agents so they improve their skills and maintain their motivation to deliver great CX.



**AI-powered workforce management meets the need for a more flexible staffing strategy.** The search for customer service talent continues to become more challenging, and the workforce is demanding more flexible options such as shorter shifts and work-from-home capabilities. Workforce managers can leverage AI to develop more flexible and accurate schedules to meet this challenge.



**AI is not an out-of-the-box technology.** Lastly, organizations will need help understanding how AI is augmenting and enhancing their contact center applications and performance. Start with defined use cases for AI, and then use each AI implementation as an opportunity to learn and better prepare for the next AI project. Lean on the application providers themselves to help design, implement, deploy, and train your staff to learn not only how the applications operate but how they can improve the performance of your contact center and business. The critical factor is how data is updated to guide the evolution of the AI models.

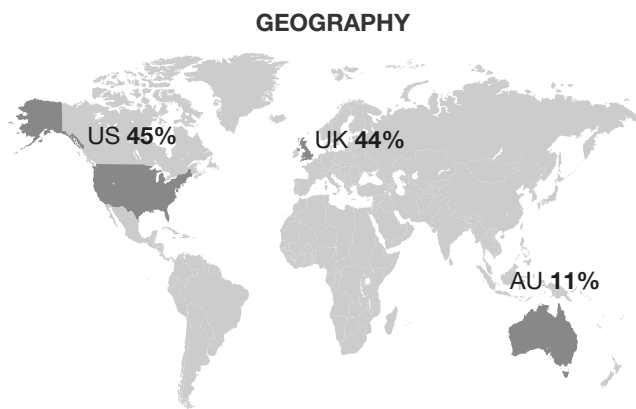
# Next Steps

See how ready you are to implement AI in the contact center. Take the assessment to compare against your peers.

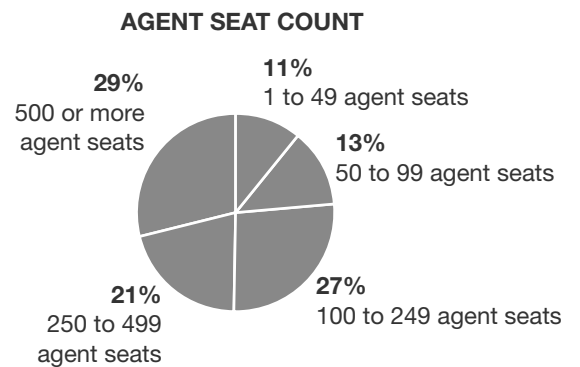
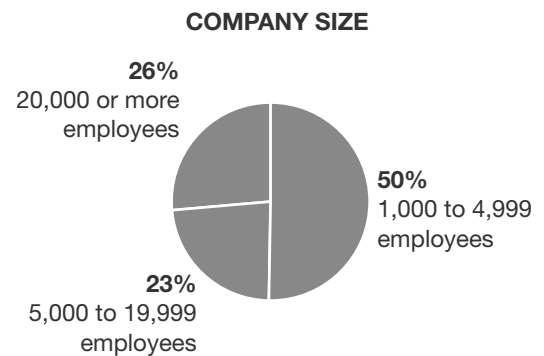
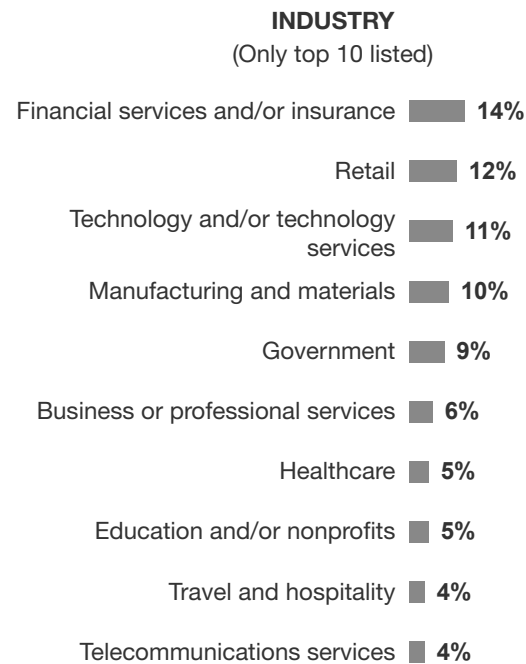
## Appendix A: Methodology

In this study, Forrester conducted an online survey of 307 organizations in the US, the UK, and Australia to evaluate adoption of AI in contact centers. Survey participants included decision makers in IT, customer experience, and contact centers who make contact center technology decisions. Questions provided to the participants asked about current contact center tools, plans to adopt AI in contact center applications, and challenges with getting started. Respondents were offered an incentive as a thank you for time spent on the survey. The study began and was completed in March 2019.

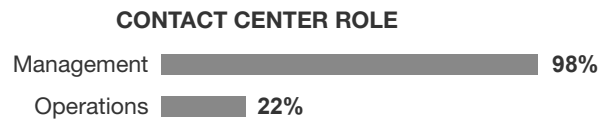
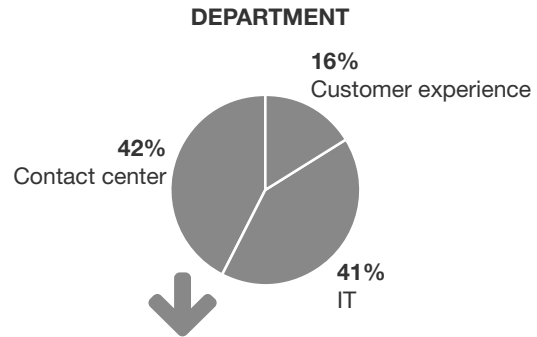
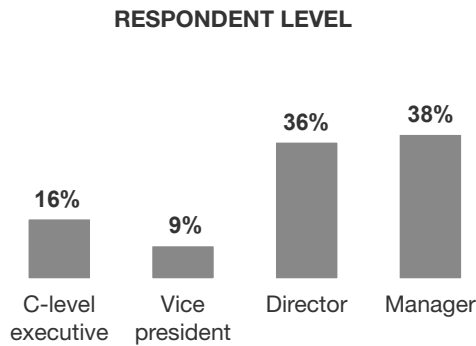
## Appendix B: Demographics/Data



- To qualify, companies must:**
- Have a contact center.
  - Not outsource their contact center functions.



Base: 307 contact center technology decision makers at global companies with contact centers  
 Note: Percentages may not total 100 because of rounding.  
 Source: A commissioned study conducted by Forrester Consulting on behalf of NICE, March 2019



Base: 307 contact center technology decision makers at global companies with contact centers  
 Note: Percentages may not total 100 because of rounding.  
 Source: A commissioned study conducted by Forrester Consulting on behalf of NICE, March 2019

## Appendix C: Supplemental Material

### RELATED FORRESTER RESEARCH

“Future-Proof Your Customer Service: Build An AI-Infused Cognitive Contact Center,” Forrester Research, Inc., February 23, 2018.

## Appendix D: Endnotes

- <sup>1</sup> Source: “Win Funding For Your Customer Service Project,” Forrester Research, Inc., February 26, 2019.
- <sup>2</sup> Sources: “Future-Proof Your Customer Service: Build An AI-Infused Cognitive Contact Center,” Forrester Research, Inc., February 23, 2018, and “Build An Outside-In Contact Center Road Map,” Forrester Research, Inc., August 7, 2018.
- <sup>3</sup> Source: “Build An Outside-In Contact Center Road Map,” Forrester Research, Inc., August 7, 2018
- <sup>4</sup> Source: “Win Funding For Your Customer Service Project,” Forrester Research, Inc., February 26, 2019.
- <sup>5</sup> Source: “Build An Outside-In Contact Center Road Map,” Forrester Research, Inc., August 7, 2018
- <sup>6</sup> Source: “The Three Customer Service Megatrends In 2019: As AI Eats Jobs, Agents Are More Valued,” Forrester Research, Inc., January 17, 2019.
- <sup>7</sup> Source: “New Tech: Conversational AI For Customer Service, Q2 2019,” Forrester Research, Inc., May 23, 2019.
- <sup>8</sup> Source: “Stop Trying To Replace Your Agents With Chatbots,” Forrester Research, Inc., April 17, 2019.
- <sup>9</sup> Source: “The Three Customer Service Megatrends In 2019: As AI Eats Jobs, Agents Are More Valued,” Forrester Research, Inc., January 17, 2019.