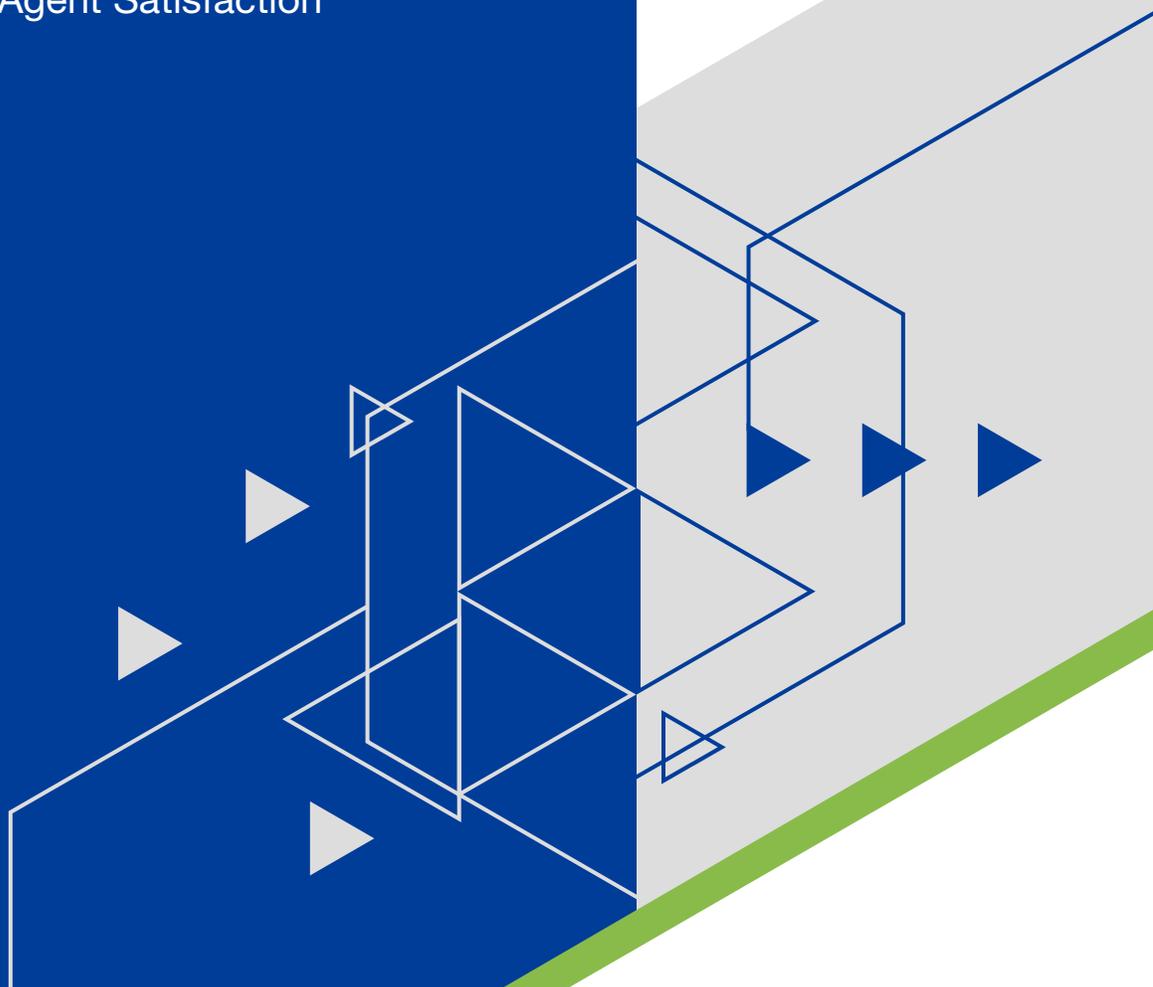


A Forrester Consulting  
Thought Leadership Paper  
Commissioned By Genesys  
November 2017

# Artificial Intelligence With The Human Touch

Blend AI With Human Agents To Improve Both  
Customer And Agent Satisfaction



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# Executive Summary

Artificial intelligence (AI) is already transforming enterprises by increasing worker efficiency and productivity, delivering better customer experiences, and uncovering new revenue streams. This transformation has extended to customer service, as companies increasingly leverage AI capabilities to interface directly with customers and handle a variety of simple, repetitive requests.

AI has not, and should not, completely take over responsibilities handled by human beings, especially because of the intricacies of human emotion in customer engagement. As such, savvy customer service and customer experience professionals must take a measured look at the strengths and weaknesses of both AI and human modalities — and how blending them together can deliver a powerful end-to-end experience for customers.

In August 2017, Genesys commissioned Forrester Consulting to evaluate how enterprises in North America, Mexico, Brazil, Europe, and Australia use AI to improve customer service. Forrester conducted an online survey of 429 customer service and experience decision makers to explore which AI solutions are currently employed, how they are used, associated implementation and adoption challenges, and the benefits they provide to the entire organization. We found that pairing AI's efficiency benefits with a human agent's ability to connect emotionally with customers results in increased satisfaction among customers and agents alike.

## KEY FINDINGS

- › **Enterprises adopt AI solutions to improve both customer and agent satisfaction ahead of cost savings.** Companies adopt solutions ranging from automated self-service (43%), chatbots (34%), and virtual assistants (42%) to advanced predictive analytics (42%), sentiment analysis (32%), and journey analytics (29%) primarily to improve customer satisfaction (51%) and agent satisfaction (46%).
- › **Human agents are still superior in understanding emotion and building trust.** This is significant because making an emotional connection in an increasingly digital world has become more challenging to do. Decision makers recognize that customer service activities, such as understanding customer emotion (46%) and building customer trust (45%), are still better performed by human agents.
- › **Blending AI with human agents allows enterprises to achieve the strengths of both.** Enterprises that have blended AI with human agents report that their customer service efforts are more effective at improving both customer satisfaction (61%) and agent satisfaction (69%).



Pairing AI's efficiency benefits with a human agent's ability to connect emotionally with customers leads to increased satisfaction for customers and agents alike.

# Enterprises Bet On AI To Better Serve Their Customers

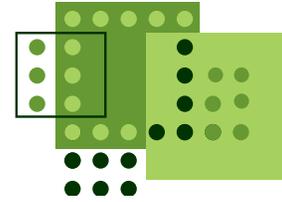
The promise of artificial intelligence (AI) is here today.<sup>1</sup> Many enterprises build their digital transformation efforts with AI at the core with the goal of dramatically improving the capabilities of all aspects of the business.<sup>2</sup>

In the realm of customer service, AI has now evolved to the point to where it can:

- › **Make operations more efficient.** AI can automate repetitive agent tasks, such as information gathering and case disposition, to shave seconds off of handle times. It can also streamline inquiry capture and resolution. This automation frees up agent resources from routine work, allowing them to handle the more complex inquiries and forge more personal connections with their customers.
- › **Deliver differentiated customer experiences.** AI can automate conversations with the potential to make them natural, personalized, and effective. AI can be used to anticipate needs based on context, preferences, and prior queries, as well as deliver advice, resolution, alerts, and offers — all while getting smarter over time.
- › **Uncover new revenue streams.** AI can find patterns in large data sets that reveal new insights companies can use to create and monetize new services for customers.

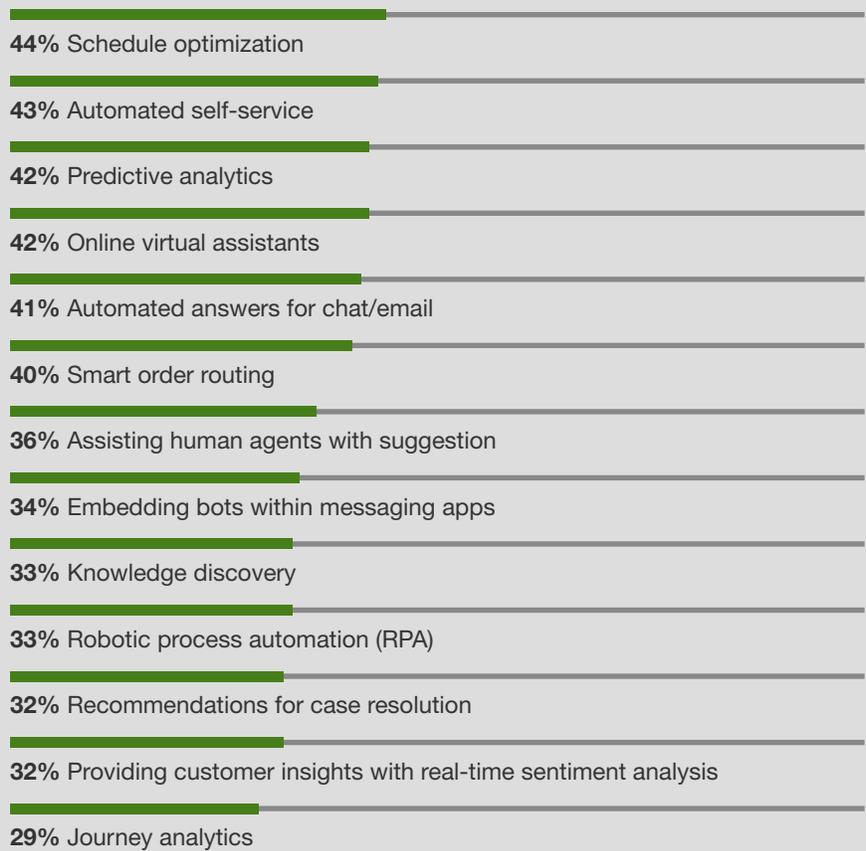
Our research confirms that enterprises have bought into the promise of AI. Results indicate that decision makers:

- › **Adopt a wide range of solutions with embedded AI capabilities to improve customer service.** Solutions range from automated self-service, chatbots, and virtual assistants to advanced predictive analytics, sentiment analysis, and journey analytics. Respondents also indicate a willingness to try out several solutions to improve customer service — averaging five solutions each (see Figure 1).
- › **Recognize the value AI has in improving both customer and employee satisfaction, as well as increasing revenue and reducing costs.** Nearly half of the decision makers we surveyed acknowledge the value of AI in decreasing customer service costs (41%). However, they primarily gravitate toward these solutions to drive better customer satisfaction (51%). As AI helps offload repetitive tasks from agents — allowing them to concentrate on nurturing and strengthening customer relationships — 46% cited improved agent satisfaction, further confirming that enterprises are not turning to AI to replace human agents; rather, it's to improve the experience for customers and agents alike (see Figure 2).



**Figure 1**

**“You mentioned that you are using or are planning to use artificial intelligence solutions for one or more scenarios at your organization. Are any of these specific (artificial intelligence) solutions being deployed/planned to be deployed (for customer service/experience scenarios)?” (Select all that apply)**



Base: 428 managers and above with responsibility for automation and AI initiatives at global enterprises with immediate implementation plans  
Source: A commissioned study conducted by Forrester Consulting on behalf of Genesys, August 2017

**Figure 2**

**“Which of the following reasons drove your organization to leverage AI tools to engage with customers?” (Select all that apply, top five selections)**



Base: 419 managers and above with responsibility for automation and AI initiatives at global enterprises with AI solutions in place  
Source: A commissioned study conducted by Forrester Consulting on behalf of Genesys, August 2017

## INTRODUCE THE POTENTIAL OF AI ACROSS THE CUSTOMER JOURNEY

Artificial intelligence can be applied throughout marketing, sales, and customer service domains to deliver value at key points along a customer journey. It can help organizations better understand their customers' behaviors and intents to provide more personalized self- and assisted-service experiences. Specifically, AI solutions can:

- › **Educate buyers to minimize purchasing errors and buyer's remorse.** Conversational AI solutions (chatbots), which can be escalated to a human if needed, can answer customer questions or process transactions, helping customers gain confidence in their choices. AI solutions can monitor a customer's prepurchase journey and intervene opportunistically at points in the journey best suited for customers to accept a coupon, an offer, or additional advice from an agent.
- › **Deepen customer relationships during onboarding.** The first experience a customer has with your firm sets the tone for the entire relationship — and loyalty suffers if the first experience is poor. Companies apply blended AI solutions for onboarding activities, such as customer activation, tracking customer health, and predicting customer satisfaction.
- › **Enhance and evolve the customer experience.** Sixty-nine percent of US consumers and 31% of UK consumers shop more with companies that offer consistently high-quality customer service. Smart companies turn after-sales service into a competitive advantage, applying AI capabilities to optimize search and knowledge discovery, reuse context from the purchase phase, and automate conversations via chatbots. They also use AI to optimize case classification, contact routing, and schedule optimization.

# AI Lacks The Human Touch Necessary To Delight Customers

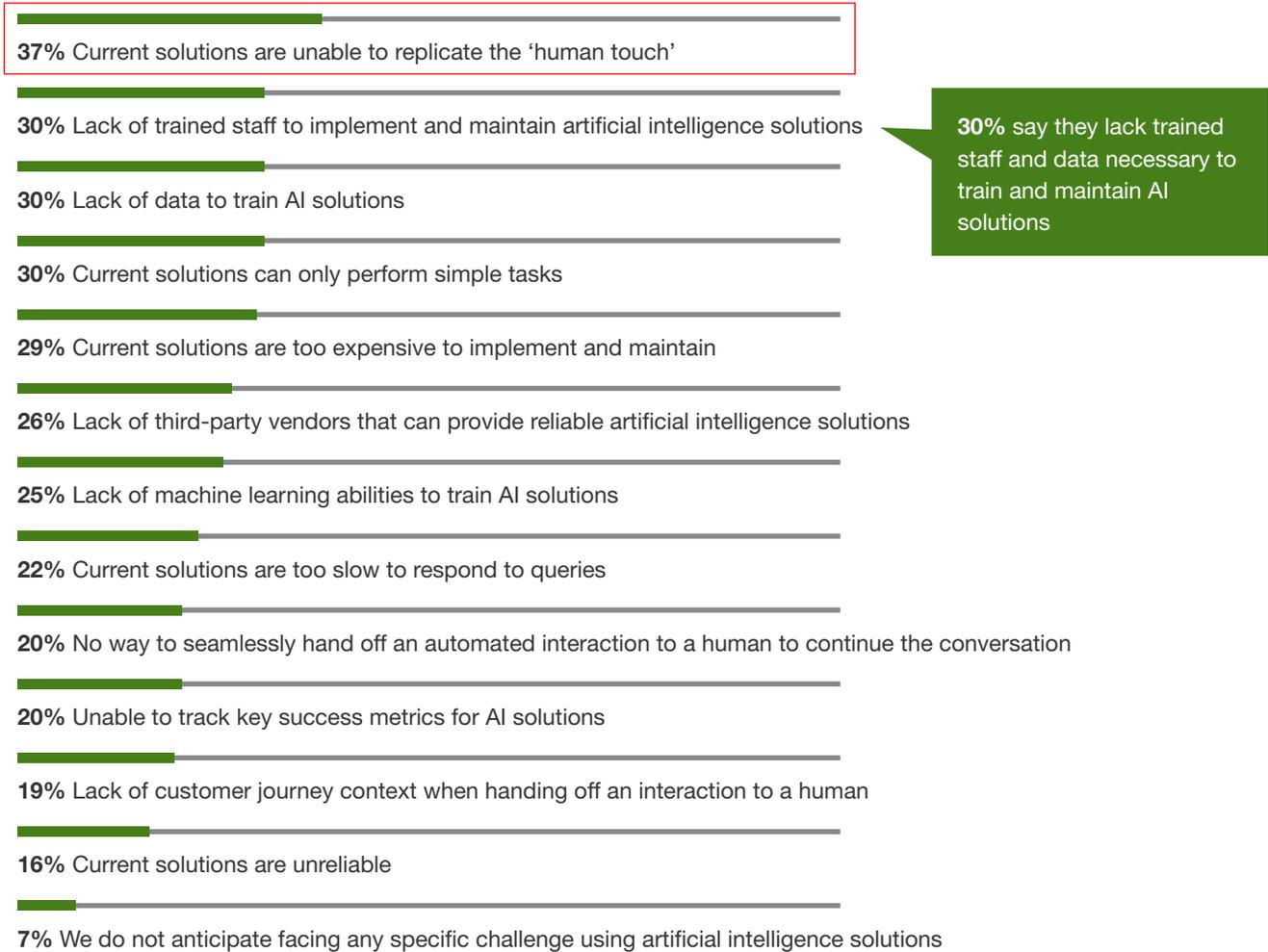
While AI holds incredible potential in revolutionizing customer service, customer experience professionals must not forget the importance of the human element. Forrester identifies the key tenets of good customer service as ease, effectiveness, and positive emotion.<sup>3</sup> And although it may be a vision for the (near) future, AI is not able to perfectly replicate these tenets in the same way as a customer service agent. This can mistakenly lead decision makers to believe that there isn't a place in their customer service strategy for the AI solutions.

Decision makers in this study have already experienced this challenge and many others. They report that:

- › **AI cannot replicate the personal touch delivered by an actual human being.** The number one challenge today is that AI cannot deliver the value that human agents currently do. They lack the “human touch” (37%) and have difficulties in guiding customers through their journey because they don't seamlessly hand off to human agents (20%). The tasks they can perform are still generally basic (30%), and some continue to report speed (22%) and reliability (16%) issues (see Figure 3).
- › **There's a shortage of skills, expertise, and data.** When technology teams leverage technologies that are either completely new to them or for which they don't have extensive expertise, gaps in delivery will naturally occur. These factors all add to the overall expense of AI solutions (29%), presenting yet another challenge. Many enterprises also do not have their data assets in place (30%) to be able to provide the initial data to test AI solutions (see Figure 3).
- › **Concerns that AI has not been perfected result in implementation delays.** Many decision makers, perhaps expecting too much from AI too soon, find their efforts to adopt today's solutions thwarted. Indeed, concerns about reliability (86%), speed (75%), and the level of functionality (76%) were the main hurdles that those in this study faced when attempting to bring on their current AI solutions (see Figure 4).

**Figure 3**

**“Which of the following challenges have you experienced/would you anticipate experiencing when using artificial intelligence solutions to improve customer service/experience?”**  
(Select all that apply)

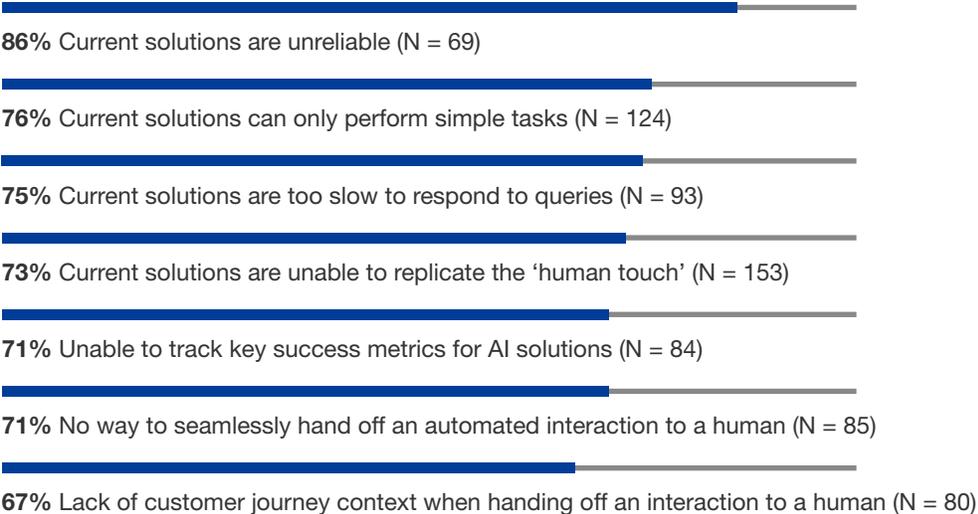


Base: 419 managers and above with responsibility for automation and AI initiatives at global enterprises with AI solutions in place  
Source: A commissioned study conducted by Forrester Consulting on behalf of Genesys, August 2017

**Figure 4**

**“To what extent have any of the challenges you experienced or anticipate experiencing prevented or delayed adoption of artificial intelligence solutions to improve customer service/experience?”**

(Showing those stating that the challenge was moderately, greatly, or primarily the reason for preventing/delaying)

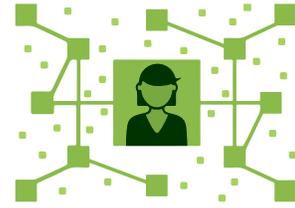


Base: Variable managers and above with responsibility for automation and AI initiatives at global enterprises that face each challenge  
Source: A commissioned study conducted by Forrester Consulting on behalf of Genesys, August 2017



# Blend AI To Deliver Automation With An Emotional Connection

Enterprises must reframe the challenges they are experiencing with their AI solutions. AI today is in its infancy, and many offerings are simple. Yet even at this early stage, AI has a lot of value as a toolset to pragmatically complement the value already being delivered by human agents.<sup>4</sup> This requires thinking of both AI and human agents as resources with their own unique strengths. When decision makers fully appreciate and comprehend this, they can then mindfully blend human agents with AI to support customers in their end-to-end journeys — spanning self-service and human-assisted channels.

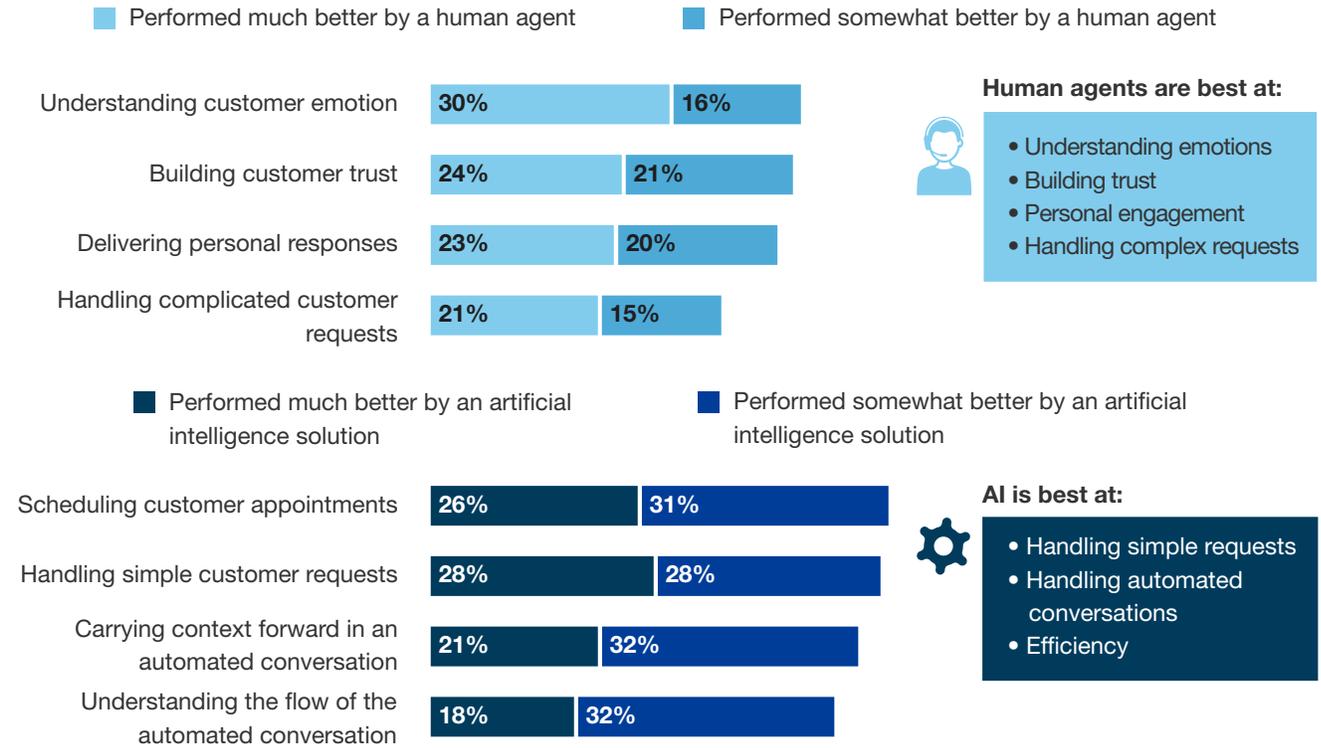


By allowing both human agents and AI to deliver on the capabilities they're best suited for throughout the customer journey, the customer can receive a more efficient and empowered experience with reduced friction.<sup>5</sup> These benefits permeate the entire customer service organization — delivering improved satisfaction and experiences for customers and agents alike, while reducing operating costs. Those in this study are learning these lessons, acknowledging that:

- › **Human agents excel at conveying emotion and understanding context.** AI still cannot match a human in being able to understand customer emotion (46%), build trust (45%), deliver personalized responses (43%), and handle complex requests (36%) (see Figure 5). These attributes are particularly helpful in the presale process where it's important to build trust and develop personal connections. They are also helpful when onboarding the customer — setting the right tone and ensuring the future of the customer relationship.<sup>6</sup>
- › **AI solutions can better handle simple requests with greater efficiency.** Decision makers nevertheless acknowledge AI's key advantage in handling simple requests efficiently (56%). This means that AI is best used to perform tasks like scheduling calendar appointments (57%), as well as both understanding the flow of automated conversations (50%) and carrying that context forward (53%) (see Figure 5). Applying AI to key after-sales activities can also be effective. For example, using speech recognition and text analytics to classify customer service calls, support automation to proactively provide service for connected devices, and AI-enhanced contact routing to send queries to agents based on skill and knowledge level.<sup>7</sup>

Figure 5

“Consider the following customer service/experience activities. Which are best performed by a human agent, and which are best performed by an artificial intelligence solution?”



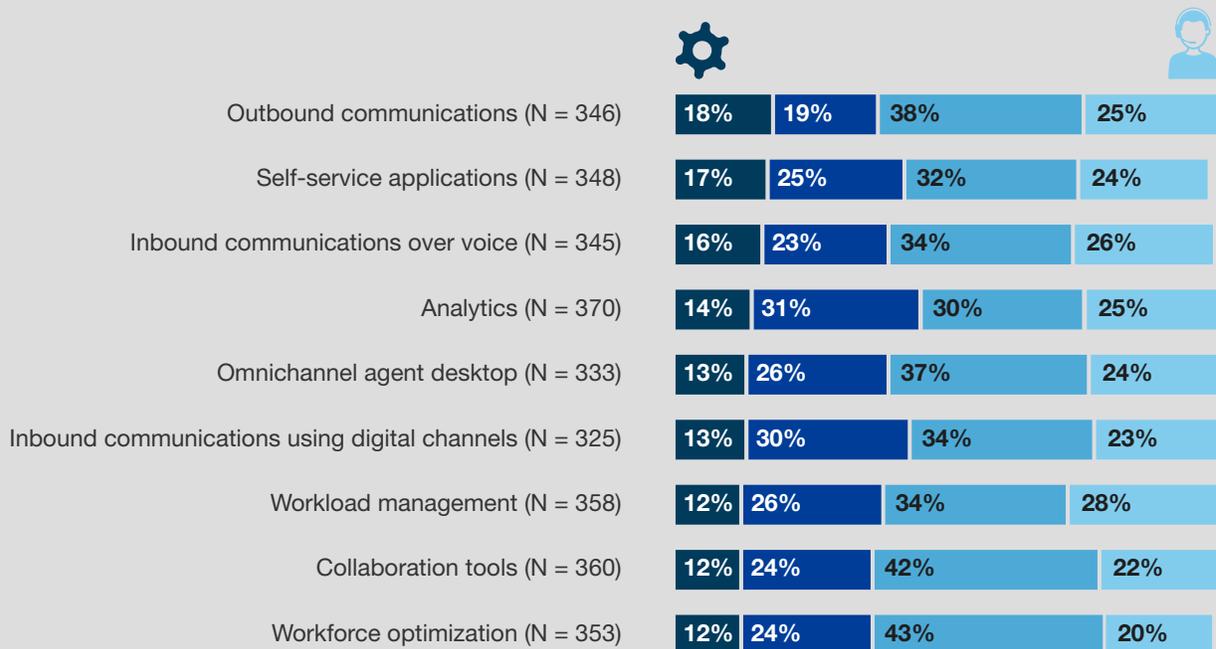
Base: 429 managers and above with responsibility for automation and AI initiatives at global enterprises  
Source: A commissioned study conducted by Forrester Consulting on behalf of Genesys, August 2017

› **The best approach is to be cognizant of the strengths of each modality and blend AI with the human touch to use each to its full benefit.** In acknowledging that both AI and human agents have their strong suits, most decision makers seek to blend them together in handling scenarios for both customer service and employee productivity (see Figure 6). This can translate into agents using knowledge management solutions to focus more on customer interactions rather than simply retaining information. Let process automation handle mundane tasks, such as applying schedule optimization to field operations to prepare a technician’s day based on their aptitude and performance. Human agents can manage the exceptions.

Figure 6

“You mentioned that you are using artificial intelligence solutions for one or more scenarios at your organization. Do they handle these scenarios extensively, or do human customer service agents continue to remain involved?”

- Artificial intelligence solutions handle this scenario completely
- Artificial intelligence solutions mostly handle this scenario, with human agents aiding only as needed or for complex tasks
- Human agents are still largely responsible for this scenario, but they regularly use artificial intelligence solutions to assist as appropriate
- Artificial intelligence solutions are used sparingly for this scenario, with human agents leading



Base: 429 managers and above with responsibility for automation and AI initiatives at global enterprises applying AI to each scenario

Note: Percentages may not total 100 because of rounding.

Source: A commissioned study conducted by Forrester Consulting on behalf of Genesys, August 2017

## BLENDING AI BENEFITS CUSTOMERS AND AGENTS ALIKE

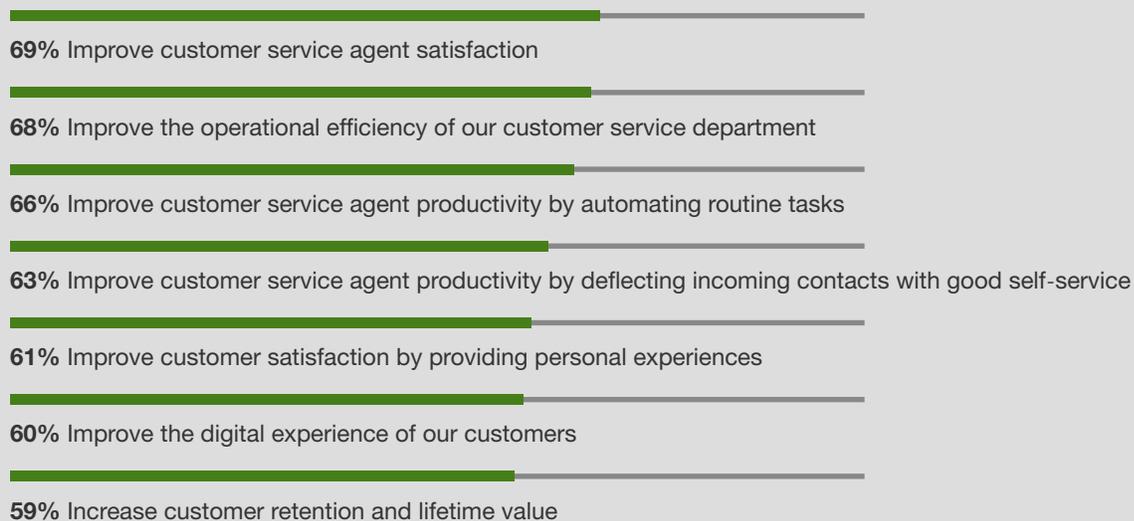
Decision makers working at enterprises that have successfully paired AI solutions with humans across customer service scenarios are already witnessing organization wide benefits, including:

- › **Improved customer experience.** Those who are blending these solutions report that their customer service efforts have been effective in improving both the satisfaction (61%) and digital experience (60%) of their customers. Improving these metrics ultimately helps drive increased customer retention and lifetime value (59%) (see Figure 7).
- › **Increased agent satisfaction and efficiency.** Why? AI offloads simple, repetitive, monotonous tasks from customer service agents — letting them concentrate on complex questions or allowing them to better connect with the customer. This means that bringing in AI does not displace or dispirit existing customer service agents. In fact, strategically pairing the strengths of AI with your employees leads to increased agent satisfaction (69%), efficiency (68%), and productivity (66%) (see Figure 7).

Figure 7

**“Considering your organization’s customer service and experience efforts as a whole, how effective have they been in helping achieve the following customer service and experience priorities so far?”**

(Showing those who are blending AI and human agents who have selected “Very” or “Extremely” effective)



Base: 80 managers and above with responsibility for automation and AI initiatives at global enterprises who have blended AI and human agents for the scenarios which they have AI solutions in place who have also identified each as a priority  
Source: A commissioned study conducted by Forrester Consulting on behalf of Genesys, August 2017

# Key Recommendations

AI is here today. Companies are leveraging AI embedded in their customer engagement platforms to gain efficiencies, increase agent productivity, deliver better customer experiences, and, ultimately, transform operations by uncovering new revenue streams. However, AI only delivers value if it is added to a solid operational foundation and incorporated into a broader context that includes your living and breathing employees. Before leveraging AI for customer service:



**Start with strategy, end with technology.** Today, AI engagement strategies are being led by various organizations within a company — from marketing to customer experience to IT and operations — and have the potential to deliver a fractured customer experience. Companies should take a step back from siloed initiatives and articulate at a companywide level the end goals for AI. Ensure that customer-facing initiatives around AI align with company strategy.



**Look for small wins.** It's impossible to make all processes more intelligent at the same time. Instead of falling victim to endless analysis, identify a set of key processes or points of engagement that matter to your customers or to your business. For example, using AI to eliminate the overhead of case disposition or to handle simple questions like password resets quickly adds up to significant cost savings. Use these improved processes as proof points and ensure that you can measure the results.



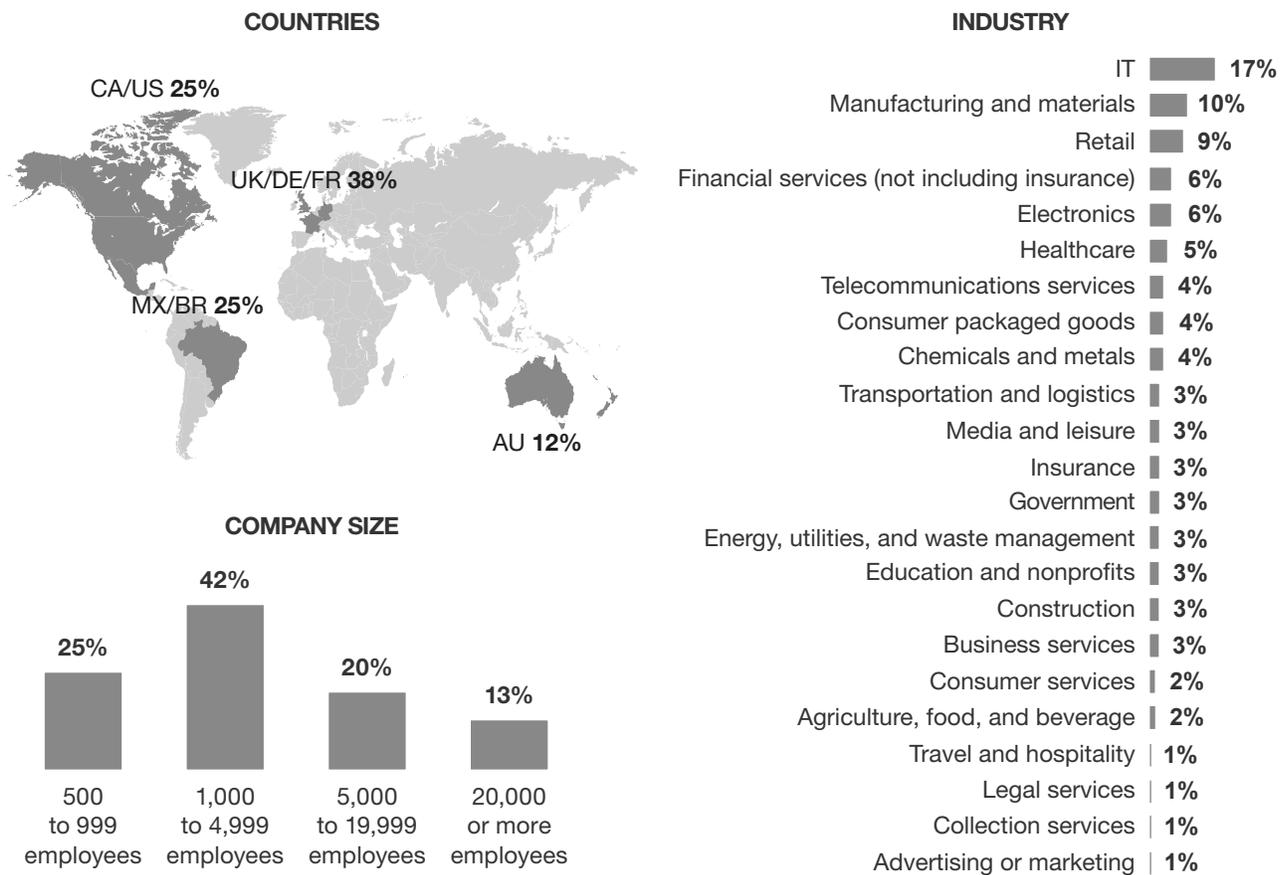
**Define your routing, escalation, reporting, and interaction data management in the context of both bots and humans.** When designing your customer engagement strategies, keep in mind that not every interaction warrants a chatbot and that not every interaction can be successfully completed with AI alone. Addressing these questions is at the core of implementing an effective blended AI strategy:

- › Do you have the logic in place to determine when an interaction should be routed to a virtual agent and when it should not?
- › Do you know what happened the last time this customer chatted with your bot, and can you use that in real time to route it appropriately?
- › If an automated conversation needs to be escalated to a live person, can you make a seamless handoff, preserving the customer context and intents?
- › What happens if no live agents are available?
- › Do you have that real-time access to agent information?
- › And finally, how will your automated agents be tied into the rest of your contact center reporting? Do you have the tools in place to measure what's working and what's not?

# Appendix A: Methodology

In this study, Forrester conducted an online survey of 429 customer service and customer experience professionals in North America, Mexico, Brazil, the United Kingdom, France, Germany, and Australia. The survey explored which AI solutions are currently employed to assist customer service activities, how they are used, associated implementation and adoption challenges, and the benefits they provide to the entire organization. Survey participants included decision makers responsible for customer experience, contact centers, and digital experience who were knowledgeable of AI adoption within their organizations. The study was completed in August 2017.

# Appendix B: Demographics/Data



Base: 429 managers and above with responsibility for automation and AI initiatives at global enterprises  
 Note: Percentages may not total 100 because of rounding.  
 Source: A commissioned study conducted by Forrester Consulting on behalf of Genesys, August 2017

# Appendix C: Supplemental Material

## RELATED FORRESTER RESEARCH

“How AI Will Transform Customer Service,” Forrester Research, Inc., June 16, 2017.

# Appendix D: Endnotes

<sup>1</sup> Forrester defines “artificial intelligence” as the theory and capabilities that strive to mimic human intelligence through experience and learning.

<sup>2</sup> Source: “Digital Rewrites The Rules Of Business,” Forrester Research, Inc., April 27, 2017.

<sup>3</sup> Source: “TechRadar™: Customer Service Intelligence, Q2 2017,” Forrester Research, Inc., April 7, 2017.

<sup>4</sup> Source: “How AI Will Transform Customer Service,” Forrester Research, Inc., June 16, 2017.

<sup>5</sup> Source: “How AI Will Transform Customer Service,” Forrester Research, Inc., June 16, 2017.

<sup>6</sup> Source: “How AI Will Transform Customer Service,” Forrester Research, Inc., June 16, 2017.

<sup>7</sup> Source: “How AI Will Transform Customer Service,” Forrester Research, Inc., June 16, 2017.