

# Stop Trying To Replace Your Agents With Chatbots

Four Approaches To Using Chatbots To Augment Your Agents Offer Clear Benefits For Companies And Customers

by Ian Jacobs  
April 17, 2019

## Why Read This Report

Customer service organizations are in a heightened state of chatbot mania. Many are rushing to replace their agents with chatbots, believing that doing so will cut costs and increase efficiencies. But removing agents from the service workflow is not the only — or even the easiest — way to gain those efficiencies. Customer service leaders should read this report to learn four approaches to, and the benefits of, agent augmentation — not replacement.

## Key Takeaways

### **Brands Choose Chatbots For The Wrong Reasons**

In the rush to automate agents and cut costs, brands choose to work hard instead of smart, which often leaves the customer experience lacking. Brands should slow down and deploy chatbots that optimize the labor they already have.

### **Focus Instead On Augmenting Human Agents**

Deploying chatbots built to make both the agent and the customer experience better will boost operational efficiencies and ensure ROI on your chatbot investment.

### **Address The Cultural Shift From Chatbots With Your Human Employees**

Your customer service agents are likely concerned about the impact of chatbots on their jobs. Promote augmentation tools as a way of boosting agents' career prospects and job satisfaction.

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## Table Of Contents

### 2 The End Is Not Nigh!

Brands Are Choosing Chatbots For The Wrong Reasons

### 3 Think Augmentation Instead Of Replacement

### 7 The Benefits Of Augmentation Go Beyond Simple ROI

Agent Augmentation Is Simple To See And Simple To Measure

Agent Engagement, Faster Proficiency, And Better Customer Experience Also Result

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## Recommendations

### 8 Address The Cultural Shift For Employees In Using Chatbots

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### 10 Supplemental Material

## Related Research Documents

[Forrester Infographic: Customer Service Chatbots Fail Consumers Today](#)

[Predictions 2019: Customer Service And Sales](#)

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### The End Is Not Nigh!

The Wall Street Journal and other mainstream publications globally have been touting a doomsday scenario for contact center employees for at least the past three years.<sup>1</sup> The theme of all these articles? “Robots are coming to take your jobs!”

Brands — and the authors of these articles — often act as if automation and AI are forces of nature like hurricanes or tsunamis. In their eyes, brands are just borne along by a wave of external forces. But that, of course, is absurd. Automation is a choice.

From farmers using cotton gins in the 1790s to B2B manufacturers using AI to predict customer health scores today, the use of automation is the result of choices that *people* and *companies* make. AI does not alter the fact that customer service leaders and their companies will decide whether to automate, why they will automate, what they will automate, and when they will automate. And our data shows that brands are *choosing* to invest in chatbots for customer service.<sup>2</sup>

### Brands Are Choosing Chatbots For The Wrong Reasons

Our clients tell us of their ambitious goal for automation: Reduce the need for human intervention and live agent contacts. They focus on cost, rather than the customer experience. The widely touted idea that chatbots will take over most customer service work leads brands astray, encouraging them to look at automation as a way to (eventually) lay off all their agents. A leading Eastern European mobile carrier reduced its agent headcount by 12% due to automation via a chatbot. North American and Western European brands can't be as direct; they talk instead of how efficiency gains, reassignment to higher-value tasks, and attrition will naturally lead to reduced headcount. But at heart, both Eastern and Western brands have the same idea: Automation will replace agents. But brands are choosing the wrong focus for their automation as:

- › **Chatbots will not reduce headcount or interactions.** In fact, hardly any contact center leaders expect headcount to decrease. When we asked global telecom technology decision makers who are heavily involved in contact centers how digital will impact contact center operations, 37% expected their agent headcount to go up, while 47% said that it would stay the same; very few believe that headcount will fall in the next two years. And nearly 50% expect total interaction volumes will increase, 42% expect them to stay the same, and just 8% believe they will decrease.<sup>3</sup>
- › **Assisted service becomes *more* complex due to the increase in automation.** When you automate the simple things, you're left with only complex issues. You still need people to handle these more complex issues, and because those issues are more complex, they take longer. Vendors and clients tell us that the average handle time is actually increasing. Simply cutting agents won't help, but automation offers a way to reduce the pressure on agent headcount while maintaining high-touch relationships with your customers.

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- › **Chatbots aren't delivering better customer experiences.** We asked brands about the results they see after implementing a chatbot. While 88% show a reduction in the volume of email, chat, or phone contact, only 12% saw a meaningful improvement in their transactional Net Promoter Score.<sup>4</sup> Chatbots and automation mean they are providing a different kind of experience to consumers — one that says: “Hey, we're not sure we want to talk to you. We'd prefer it if you talked to automation.” Unsurprisingly, many consumers don't like that.

“I think interacting with a bot can feel really impersonal. If you are already ticked off at a company, then finding yourself on the line with a bot might tip you over the edge — ‘I'm not even important enough to these people to rate a human being.’”<sup>5</sup>

## Think Augmentation Instead Of Replacement

Rather than automating away your agents, you should look at blending automation and humans, using these tools to augment your customer service agents and improve the customer experience. When thinking about how to augment agents with conversational self-service technologies, we need to keep Kasparov's Law in mind: “Weak human plus machine plus better process is superior to strong human plus machine plus inferior process.”<sup>6</sup> In other words, a strong process is key to success — and what is understanding when, where, and how to assist your agents but a strong process? As such, we see four approaches to augmenting agents:

1. **Chatbots for agents offer a useful test and training environment.** Rather than having a chatbot that faces customers, you have one that faces only agents. While some brands are trying this, it is the weakest approach and delivers a poor customer experience: The agent has to keep switching between the chatbot conversation and the customer conversation, leading to long lag times between responses to the customer (see Figure 1). But using chatbots internally first is a good starting point for many firms just setting out on their chatbot journey. Your agents make an ideal and captive test bed for a bot before you expose it to your customers.
2. **Human-intermediated chatbots provide suggestions and boost efficiency.** In this case, an AI tool monitors a conversation between a human agent and a customer and makes conversational suggestions to the agent (see Figure 2). The agent can then take those suggestions and, typically with one click, push them directly to the customer; reject the suggestion entirely and type their own answer to the customer; or take the suggestion and modify or personalize it and then send it to the customer. A machine learning loop watches these interactions and uses the agent's actions to improve future suggestions. The customer never knows that a chatbot is involved here. She is simply having a conversation with an agent who is doing a better job, faster.

Working in partnership with DigitalGenius, Dutch airline KLM has seen a 50% reduction in handle times for many types of interactions because its agents don't need to type everything.<sup>7</sup> More importantly, KLM is able to handle greater volumes with the same number of full-time

**Stop Trying To Replace Your Agents With Chatbots**

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employees while maintaining high-touch relationships with customers. In the UK, local government organization Aylesbury Vale District Council is using a similar system and seeing similar results.<sup>8</sup> The customer has a better experience, the brand gains efficiency — everybody wins.

- 3. Front-end chatbots take care of routine tasks for human agents.** The chatbot gathers all relevant information, authenticating the customer, determining the customer's goal, and then handing the interaction off to a human agent to resolve (see Figure 3). It may involve a number of bots that tackle the early information-gathering stages before human agent resolution. This is similar to what a lot of brands are doing when they're trying to automate the customer's experience entirely, with the difference that the brand does not expect the chatbot to actually resolve the issue. The focus is on efficiency gains.

"Agents don't want to be doing the busywork of asking the spelling of a customer's name; they don't feel like they are adding value," said Justin Borah, vice president and general manager for support ops at TechStyle Fashion Group.

- 4. Intermingled workflows allow agents and chatbots to do what each does best.** Unlike with the front-end chatbot, a human agent can invoke a chatbot to handle a particular task and then hand the interaction back to the human agent. If, for example, a customer has a problem with his smart TV setup, the human agent tries to figure out what the issue is — maybe the problem is with the customer's router. She invokes her company's router diagnostic bot; the diagnostic bot figures out whether the problem is indeed the router and then hands the diagnostic information back to the human agent. Humans do the high-touch portion that involves their cognitive and emotional abilities, while the bot does more routine tasks like diagnostics (see Figure 4).

Hyatt Hotels uses a voice-based chatbot system from a vendor called Interactions that automates parts of its reservation process. At heart, this system, which is backstopped by humans to provide disambiguation to the chatbot, displaces Hyatt's interactive voice response (IVR). Once the chatbot has authenticated the customer and gathered information like when and where they're looking to stay, the chatbot transfers them to a human reservation agent, who can now focus on selling. The agent isn't always the end of the call: He can transfer the caller back to the virtual assistant for automated reservation confirmation and a postcall survey. Hyatt has seen a 33% average reduction in handle time with its more efficient customer care solution, resulting in more than \$4 million in savings.<sup>9</sup>

### Stop Trying To Replace Your Agents With Chatbots

Four Approaches To Using Chatbots To Augment Your Agents Offer Clear Benefits For Companies And Customers

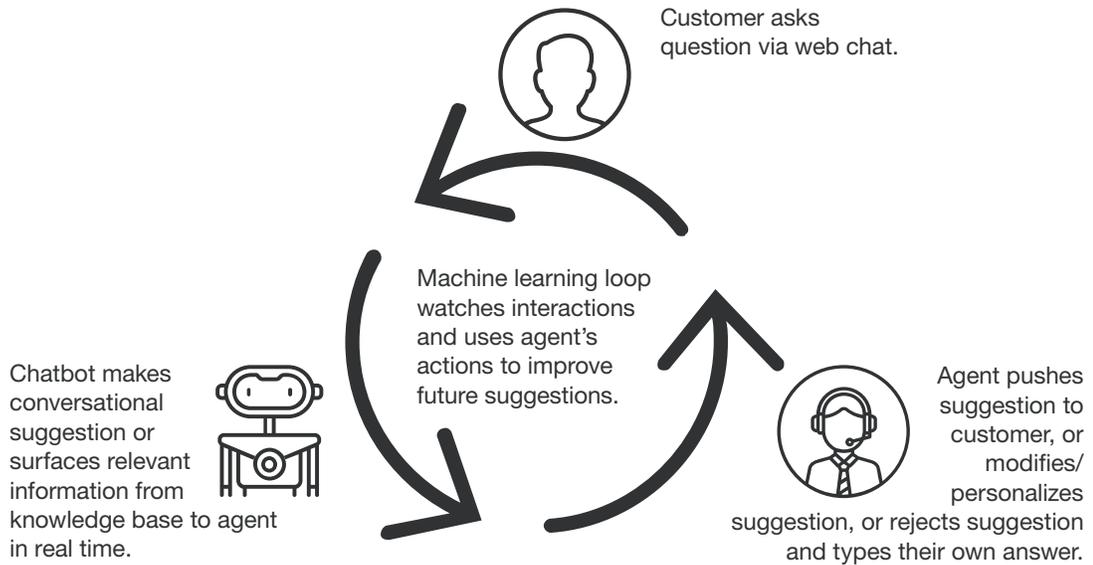
**FIGURE 1** Chatbots For Agents Are A Starting Point Only

#### 1. A chatbot for agents



**FIGURE 2** Human-Intermediated Chatbots Monitor Conversations And Offer Suggestions To Agents

#### 2. A human-intermediated chatbot

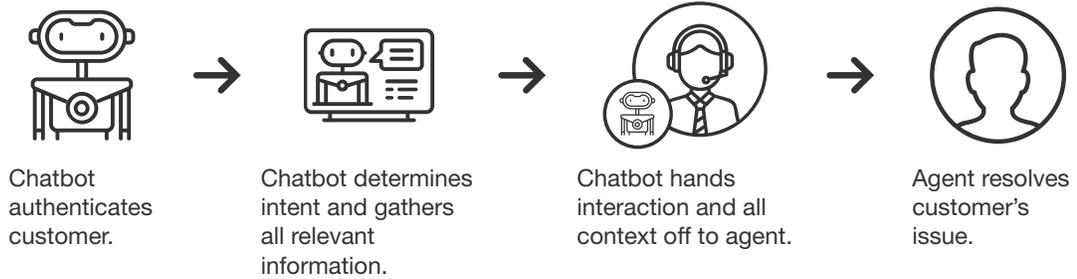


**Stop Trying To Replace Your Agents With Chatbots**

Four Approaches To Using Chatbots To Augment Your Agents Offer Clear Benefits For Companies And Customers

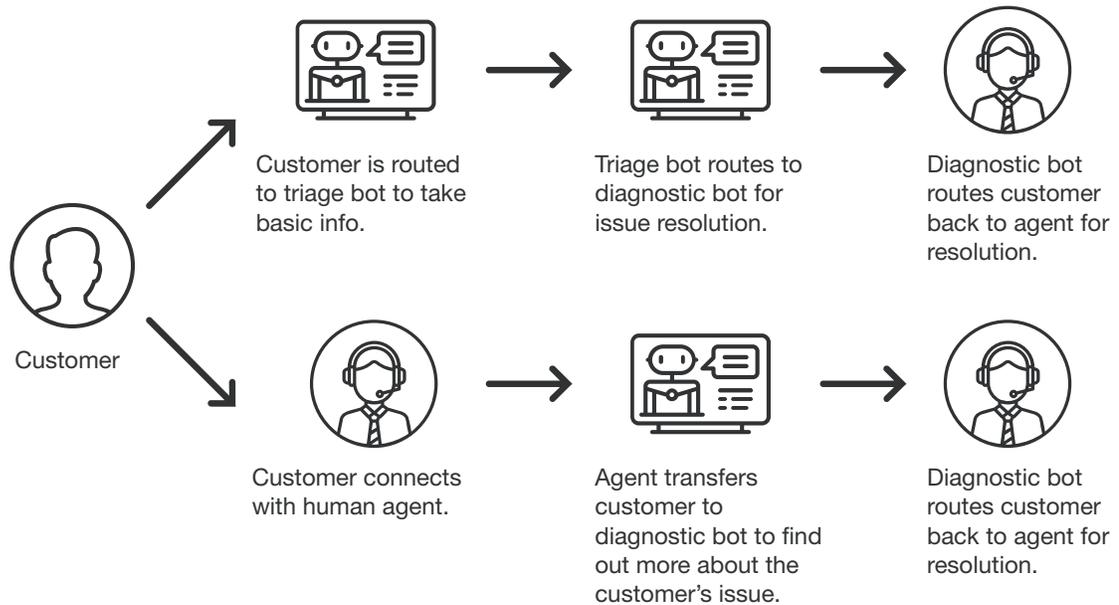
**FIGURE 3** Front-End Chatbots Improve Efficiency By Automating Low-Value Tasks

**3. A front-end chatbot**



**FIGURE 4** Intermingled Workflows Allow Agents And Chatbots To Focus On What They Do Best

**4. Intermingled workflows with agents and chatbots**



**Stop Trying To Replace Your Agents With Chatbots**

Four Approaches To Using Chatbots To Augment Your Agents Offer Clear Benefits For Companies And Customers

## The Benefits Of Augmentation Go Beyond Simple ROI

Your business case should incorporate benefits both tangible (like a reduction in agent handle time) and intangible (like increased employee engagement).

### Agent Augmentation Is Simple To See And Simple To Measure

When investing in any technology, you need to be able to demonstrate the return on that investment. Augmentation offers simpler, clearer ROI models than replacement:

- › **Identifying reduced handle time via augmentation is easy.** Let's look at some of the use cases where we have chatbots supporting an agent. If chatbot-augmented agents can reduce the handle time for an interaction by 2 minutes and 34 seconds, the brand can handle more chats with the same number of agents, so the ROI is obvious. Brands know what every second of their agents' time costs. The same is true for interactions with the chatbot that simply sits on the front end: Again, if you reduce the average handle time for chats by 2 minutes and 34 seconds, the ROI is simple to see and simple to measure.
- › **Measuring deflection when replacing agents is very difficult . . .** When brands try to replace agents, they get into a debate about measuring ROI by measuring deflection. How many interactions did we deflect away from agents? This stringent view of deflection is very hard to measure. Typically, brands measure deflection by looking at repeat contact. Did a customer contact us via the chatbot and then contact us again? But measuring repeat contact is extremely nuanced: Is it repeat contact within 6 hours, within 24 hours, within 48 hours? Is it repeat contact only in the channel the customer initially used, or in any channel? What happens if you start with web chat and the customer then picks up the phone and calls? Are you missing that? Are you looking for repeat contacts on the same case type?
- › **. . . and ignores the ROI from other opportunities.** Your best agents can predict other questions to ask the customer that reduce repeat contacts and find sales prospects. For example, if a customer changes their address with a bank, a chatbot would ask for the new address and update the bank's system — a successful interaction from the chatbot's point of view. A human agent might ask if the customer needs new checks sent to their new address, avoiding a repeat contact. Or, she might dig into the reason for the move, discover that the customer is an empty nester with children away at school, identify an upsell or cross-sell opportunity about those children, and open up a sales conversation.

### Agent Engagement, Faster Proficiency, And Better Customer Experience Also Result

Clearer ROI isn't the only benefit. You can also improve:

- › **Your agents' engagement.** Imagine two brands with equivalent agent populations: Brand A is designing chatbots to replace agents in the workflow; brand B is designing chatbots to augment agents to help them. Which brand do you think will end up with better agent engagement? Which

**Stop Trying To Replace Your Agents With Chatbots**

Four Approaches To Using Chatbots To Augment Your Agents Offer Clear Benefits For Companies And Customers

one will have lower agent turnover? When you actively try to replace agents, they are aware of it, and it affects their performance. When a brand provides tools to help their agents, the agents recognize it, and it improves their performance. And happier customer service agents mean happier customers and happier shareholders. Research by Aon Hewitt 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>10</sup>

- › **Your agents' time-to-proficiency.** By supporting agents via technological augmentation, customer service organizations can turn L1 agents into L2 agents more quickly. Agents can handle more complex questions more effectively because the chatbot provides information that they might not know. This benefit is key for all brands, but it is critical for business process outsourcers and contact center outsourcers where labor is the entire business. It's also critical in the more complex environment that results when automation succeeds.
- › **Your customers' experience.** Customers benefit from more than just engaged, proficient agents. When you try to replace agents in the workflow by automating entire customer service interactions, there is a learning curve: Chatbots will fail, and they will fail regularly. Brands are testing this technology on their customers in the hope that machine learning will make responses more accurate over time. But that means that the customers who interact with you earlier are getting poor answers and poor experiences. Using your captive agents as a test bed is a better approach, as they can improve the performance of your virtual agents while still providing excellent experiences to your customers.

## Recommendations

### Address The Cultural Shift For Employees In Using Chatbots

Customer service leaders looking at implementing or expanding their use of chatbots need to tread carefully. Providing a simple cost-benefit analysis isn't enough. You must also address broader cultural challenges with your employees.

- › **Get out your calculator.** Work out the calculations that are unique for your brand to show the ROI. The key? How many seconds of average handle time reduction do you need to create the cost savings you would want if you were trying to increase the number or complexity of the queries that agents handle? If you were going to reduce your headcount by 5%, and that worked out to be 20 agents, what is the fully loaded cost of those agents? Now you have a number. You know what each second of an agent's time costs; you can now come up with a calculation that says to equal the 20 heads that we wanted to reduce, we now need to reduce our average handle time by x.

Or, even better? Use the rollout of your agent augmentation tools as an opportunity to rethink your customer service success metrics. As we've pointed out, customer issues are getting more complex, interactions are getting longer, and humans are required to provide high-touch, empathy-

**Stop Trying To Replace Your Agents With Chatbots**

Four Approaches To Using Chatbots To Augment Your Agents Offer Clear Benefits For Companies And Customers

driven approaches to identify cross-sell and upsell opportunities. With this reality, is average handle time really the best metric for driving your organization's approach to service? Instead, start to balance your efficiency-focused metrics with customer experience and outcome-focused metrics.

- › **Create a communication program for agents.** Think about how you're going to communicate what this technology does for and to the agents well before you start to roll it out. What are you going to tell the agents about these tools? Your brand already has HR and agent-training folks with expertise in communicating with your specific agent population; work with them to design and roll out messaging that will drive better agent adoption.
- › **Ensure agents understand chatbot suggestions.** It is worth trading off some accuracy for comprehension if it allows better collaboration between humans and AI. Ensuring your human agents understand why the AI is making some suggestions is preferable to being 100% accurate all of the time. If your agents don't understand, they will fight the system, so if you have to balance comprehension and accuracy, err on the side of comprehension.
- › **Work with your workforce planners.** Reducing the handle time of interactions will affect workforce planners' ability to forecast and schedule your agents. And this will continue as automation improves and queries become more complex and take longer to resolve.

**Stop Trying To Replace Your Agents With Chatbots**

Four Approaches To Using Chatbots To Augment Your Agents Offer Clear Benefits For Companies And Customers

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## Supplemental Material

### Companies Interviewed For This Report

We would like to thank the individuals from the following companies who generously gave their time during the research for this report.

DigitalGenius

KLM

Kcell

TechStyle Fashion Group

## Endnotes

<sup>1</sup> Here are just two examples of this type of news headline. Source: Josh Ye, "Chatbots set to take over most customer service work, say Hong Kong start-ups," South China Morning Post, July 11, 2017 (<https://www.scmp.com/tech/start-ups/article/2102051/chatbots-set-take-over-most-customer-service-work-say-hong-kong-start>) and Parmy Olson, "How Vodafone's Chatbot Technology Is Helping It Cut Jobs," Forbes, February 8, 2019 (<https://www.forbes.com/sites/parmyolson/2019/02/08/how-vodafones-chatbot-technology-is-helping-it-cut-jobs/>).

**Stop Trying To Replace Your Agents With Chatbots**

Four Approaches To Using Chatbots To Augment Your Agents Offer Clear Benefits For Companies And Customers

<sup>2</sup> When we asked brands about their specific plans for chatbot investments in 2017, 73% were using, piloting, or testing chatbots for their websites; 86% were using, piloting, or testing them for messaging platforms, such as Facebook Messenger and WhatsApp. Source: Forrester's H2 2017 Global Mobile Executive Online Survey.

However, when we asked US online adults in 2018 to what extent they think that chatting with a company's AI customer service agent instead of a real person when they need help will affect their quality of life, 54% said negatively or very negatively. See the Forrester report "[Forrester Infographic: Customer Service Chatbots Fail Consumers Today.](#)" Source: Forrester's Consumer Energy Index Online Survey, US Consumers, September 2018.

<sup>3</sup> Source: Forrester Analytics Global Business Technographics® Networks And Telecommunications Survey, 2018.

<sup>4</sup> This is based on a Forrester executive survey in 2017; we surveyed 22 brands. Net Promoter and NPS are registered service marks, and Net Promoter Score is a service mark, of Bain & Company, Inc., Satmetrix Systems, Inc., and Fred Reichheld.

Forrester's Customer Experience Index (CX Index™) research supports this. For example, drivers relating to good customer service have the most impact on a health insurer's overall CX Index score. Health insurers currently perform best in this driver category, but that's hardly good news. Only 56% of customers feel they can get help when they need it and that employees know how to solve their issues quickly. Health insurers should take this into consideration when evaluating and adopting new digital customer service technologies like chatbots or real-time conversational guidance and analytics tools like Cogito. See the Forrester report "[The US Health Insurers Customer Experience Index, 2018.](#)"

<sup>5</sup> See the Forrester report "[The Consumer Tech Stack](#)" and see the Forrester report "[Forrester Infographic: Customer Service Chatbots Fail Consumers Today.](#)" Source: Forrester Analytics ConsumerVoices Market Research Online Community, Q4 2017 (US).

<sup>6</sup> Garry Kasparov derived this law from playing computer chess systems. Source: Gaurav Mathur, "Kasparov's Law," Curated Intelligence, October 20, 2017 (<https://curatedintelligence.com/2017/10/20/kasparovs-law/>).

<sup>7</sup> Source: "KLM Royal Dutch Airlines Transforms Social Customer Service with DigitalGenius AI," DigitalGenius (<https://www.digitalgenius.com/casestudy/klm-royal-dutch-airlines-news/>).

<sup>8</sup> Source: "Aylesbury Vale Reduces Costs and Drops Response Times by 50% with DigitalGenius," DigitalGenius (<https://www.digitalgenius.com/casestudy/aylesbury-vale-district-council-uses-artificial-intelligence-to-lower-response-times-and-costs/>).

<sup>9</sup> Source: "Hyatt Saves \$4.4 Million with Conversational Reservations Application," Interactions ([https://www.interactions.com/wp-content/uploads/2018/09/INT\\_CS\\_Hyatt\\_021517.pdf](https://www.interactions.com/wp-content/uploads/2018/09/INT_CS_Hyatt_021517.pdf)).

<sup>10</sup> Source: "2017 Trends in Global Employee Engagement," Aon Hewitt, 2017 (<https://www.aon.com/unitedkingdom/attachments/trp/2017-Trends-in-Global-Employee-Engagement.pdf>).

More engaged agents also lead to better job performance, productivity, and retention — one of the costlier factors in managing customer service operations. Studies show that employers sharply reduce burnout and employee turnover when they pay attention to employee workload and help employees balance their job demands with technology and training. See the Forrester report "[How To Build A Modern Agent Desktop And Transform Customer Service Experiences.](#)"

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