

# Predictions 2018: Blended AI Will Disrupt Your Customer Service And Sales Strategy

## Prepare For Dips In Customer Satisfaction And Service Levels

by Daniel Hong, Nick Barber, Ian Jacobs, John Bruno, Kate Leggett, and Art Schoeller  
November 9, 2017

### Why Read This Brief

Artificial intelligence. All the craze. Application development and delivery (AD&D) professionals are on the frontline in learning how to use AI in customer service and sales. Whether that's through chatbots, robotic process automation, or virtual assistants, you have the task of setting expectations as to what's possible with AI. In 2018, it's time to make AI work. You must separate fact from fiction, and start understanding the operational aspects you need to support AI while still keeping tabs on areas where you can apply it to improve customer service and sales.

### Key Takeaways

#### **Firms Will Use AI For Visual Experiences To Improve Customer Service And Sales**

Firms will apply AI more widely in visual perception. On the backdrop of a mobile-first world, companies will use image detection and facial expression analysis to improve service and sales outcomes.

#### **AI Will Start To Replace The Email Channel**

Chatbots and chat will increasingly become alternatives to email as companies optimize their customer service strategies.

#### **CSAT And Agent Satisfaction Will Drop**

Pressure to reduce costs and headcount in contact centers will negatively impact customer satisfaction (CSAT) as companies push more customers toward digital and chatbots. Dissatisfied agents will further decrease CSAT given the added tasks of tagging phrases to aid machine learning for AI.

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## New Applications Of Blended AI Will Augment Service And Sales

In 2018, companies will operationalize AI and apply it to specific customer-facing channels and sales tools. They'll understand that machine learning often requires a highly manual process of categorizing text, speech, or visual customer interactions that are not recognized by AI technology. Having a successful customer service or sales program that leverages AI requires the right blend of technology and human-assisted processes to improve machine learning. We call this blended AI. AD&D pros supporting customer service organizations and sales teams will become more familiar with blended AI because Forrester expects that:

- › **Several major brands will kill customer service email in favor of chatbots and chat.** Major brands will begin to phase out email buried in websites and mobile apps in favor of real-time communications via chat and chatbots. Globally, 31% of firms Forrester surveyed were using chatbots in 2016 or planned to do so in 2017.<sup>1</sup> Many companies are chomping at the bit to replace human agents with virtual ones, especially when they see claims of deflection rates of up to 80%.<sup>2</sup> Giving customers the ability to stay in a text channel and receive real-time guidance from chatbots, live chat agents, or a combination of both will be a growing trend.

**Action: Use your email, chatbot, and chat transcripts to make self-service better.** Parse through text channel transcripts with machine learning to surface customer intent, voice-of-the-customer, and sentiment data via text analytics. Then apply those learnings to improve self-service and agent-assisted experiences with the mission of dialing up self-service over time. Email is becoming less relevant in most verticals, and real-time two-way conversation is a logical evolution to engage customers in the moment to expedite resolution and lower costs. In doing so, you're able to glean insights quicker to optimize self-service faster.

- › **Companies will use visual sentiment analysis to improve service and sales outcomes.** Visual engagement technology can gauge emotion and sentiment based on the customer's facial expressions in face-to-face interactions. This will open the door for new agent key performance indicators beyond handle time and Net Promoter Score (NPS) — something we'll call sentiment

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lift.<sup>3</sup> The computer vision and emotion analysis technology exists today, but firms haven't used it for customer service and sales. We expect financial services — a vertical with a stream of new entrants that are challenging incumbents — and retail to be early adopters.

**Action: Leverage agents, and incentivize customers to train the AI.** Thirty-two percent of customers used screen sharing for customer service in 2016, and 32% used video chat.<sup>4</sup> Companies can continue to use their visual engagement platform and integrate it with sentiment analysis technology. Agents and customers will need to train the engine by offering feedback throughout the interaction. Teams can get budget for this technology by showing that positive sentiment results in higher average order value. The service team will use the metric to adopt best practices across the organization.

- › **Field service teams will use image analysis to diagnose and route problems.** Field service, which has already adopted augmented reality, will use image analysis to understand and route hardware problems. Diebold already uses live video for field service, and Pella is looking at using the technology for customer service.<sup>5</sup> Image analysis will take this one step further and save agents and customers time diagnosing and routing problems. While discussions will start in the contact center, we don't expect to see that space adopt image analysis until it has been trialed by field service counterparts.

**Action: Use your field service reps to pretrain the AI.** Many of today's image analysis technologies — Amazon Rekognition, Azure Computer Vision, and Google Cloud Vision, for example — come pretrained. But the pretraining stops short of business-specific analysis. It might be able to identify an ATM, but it can't tell the model or state of it. That's where humans can help train the AI on business-specific analysis, which could include manually entering model numbers along with an image or video. Computers will need help from humans in the short term, but the time and effort investment will pay dividends once training is complete.

- › **At least one B2B firm will conduct more than 50% of its lead nurturing with AI.** There is a direct correlation between the value of AI and the amount of quality data these systems can consume. Companies already use AI to analyze incoming emails to understand requests and sentiment and to recommend next best actions for sellers. In 2018, conversational AI will automate more and more of the lead-nurturing process. This will reduce the cost of a sale, allow companies to create a greater reach, and enable sellers to focus their time on the most qualified leads. Expect firms that use AI effectively to see revenues increase by 5% to 10%.

**Action: Tie your marketing automation to CRM with AI.** Great lead-nurturing practices are equal parts marketing and sales. Start by analyzing your most effective email campaigns and the practices of your most successful sales development reps for the kinds of questions they ask and answers they provide. Infusing an AI system with brand and process knowledge allows it to better mimic human behavior. Connect a conversational AI solution to these insights, and have it support fewer than 10 sellers, with routine monitoring for content accuracy and tone. When the desired accuracy is met, roll it out to the larger team.

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## AI Implementations Will Have A Human Impact, Internally And Externally

AI — a technology designed to automate tasks for humans — ironically requires a lot of support from humans. From the training and optimization of predictive models, to the mapping of content to intent, to configuring next best actions, humans are inextricably linked to AI. And it doesn't stop there. Humans are necessary to ensure data hygiene and curate content in knowledge bases. AI requires a great deal of resources. However, if done right, an AI solution can yield significant cost savings and sales improvement. In 2018, expect that:

- › **Customer satisfaction and service levels will dip as chatbots gain momentum.** Service levels and customer satisfaction will suffer due to increased management expectations of automation with AI and chatbots. Contact center managers are under pressure to yet again cut agent headcount amid increased complexity of calls and diversity of access channels. Lofty goals, such as reducing call volumes by up to 50% in two years by driving traffic to digital, are not unusual. Customer service numbers will be harder to find on corporate websites and in apps as companies look to drive more traffic to chatbots, self-service, and chat.

**Action: Augment your agent workforce with internal chatbots to service customers.** Don't fall into the trap of measuring chatbot success solely by deflection. Unlike the brand(s) that will forge ahead with replacing agents with chatbots, look at ways to use the tools to provide customers with new — and better — customer experiences. For example, since your human agents will be forced to handle more complex service issues, create chatbots that augment and support those agents.

- › **Companies will fail to throw enough resources to prepare for AI.** Knowledge management (KM) for most companies needs revamping in order to scale with AI investments. After all, KM is the content source that feeds future investments in customer-facing and employee-facing experiences. Many companies will adopt KM solutions that use intelligence to understand natural language requests and determine intents, but a large number of firms will fail to dedicate enough resources to keeping knowledge in line with evolving customer demand and products.

**Action: Make knowledge management the foundation of your self-service strategy.** Without the right resources to curate content, the knowledge base quality deteriorates. Start by creating knowledge from call disposition logs, discussion boards, and chatbot, web chat, and email transcripts. Choose a KM program — like knowledge-centered service — to follow. Deploy a KM solution that can understand natural language requests, determine intent, autocategorize ingested content, and use machine learning to surface increasingly accurate search results. Deploy the knowledge base internally before rolling it out to your customers.

- › **More agents will quit because of work overload.** Blended AI will gain momentum as contact center agent desktops fold in collaborative agent tagging capabilities to improve machine learning. For example, a live chat agent can look through a chatbot transcript to see where the chatbot didn't understand the customer. The agent can tag an intent to that particular phrase. This

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additional task exacerbates an already complex list of responsibilities, applications, and processes that today's agent must own, use, and follow. Without the right tools, metrics, and campaigns, companies put employee experience at risk.

**Action: Modify agent metrics, and implement a campaign to incentivize tagging.** If agents are tasked with going through transcripts or audio clips and tagging intents as part of their workflow, then traditional metrics like average handle time and calls or chats per hour need to be relaxed. In addition, implement a reward-based system to keep agents engaged and incentivized to tag transcripts and audio accurately. The vendor Interactions has successfully pulled off blended AI with agents at scale for several years. The Facebook M consumer service also uses a blended AI approach to improve its conversational AI.

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## Endnotes

- <sup>1</sup> Every year, Forrester surveys digital business and marketing professionals responsible for their companies' mobile programs. Four percent currently use chatbots, 9% are piloting chatbots, and 26% plan to pilot chatbots. Source: Forrester's H2 2016 Global Mobile Executive Online Survey.
- <sup>2</sup> An online financial services company, using a chatbot from Creative Virtual, saw a reduction in web chat volume of 80%. The company's web chat agents were constantly forced to answer repetitive, non-account-specific questions; now the chatbot handles those questions. Source: "Financial Services Company," Creative Virtual (<http://www.creativevirtual.com/financial-services-company/>).
- <sup>3</sup> 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.
- <sup>4</sup> See the Forrester report "[Visual Engagement Drives Relationships And Revenue For Customer Service](#)."
- <sup>5</sup> Diebold uses Librestream Onsite to help its field service technicians more efficiently service ATMs: The field technicians can be connected via video with experts to guide them through difficult repairs.

At Oracle's Modern Customer Experience conference in April 2017, Julia Neary, a representative of Pella, stated that Pella has a visualization tool and is looking at using video chat for its customer service. Source: "Modern Customer Experience 2017 Day 2," Oracle Video, April 26, 2017 (<http://moderncustomerexperience.brightcove.com/detail/videos/modern-customer-experience-2017/video/5412282939001/modern-customer-experience-2017-day-2?autoStart=true>).

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