Artificial Intelligence is Transforming the Customer Experience
Enhancing Self Service and Empowering Agents

A Frost & Sullivan White Paper
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CONTENTS

Introduction ...................................................................................................................................... 3
AI Transforms the Customer Service Metrics that Matter......................................................... 4
Self Service: Redefining the New Normal .................................................................................. 6
Agent Experience: Boosting Productivity, Retention and Customer Satisfaction ................. 8
Advanced Analytics: Turning a Cost Center into a Revenue Center ...................................... 9
What to Look for in a Provider .................................................................................................... 10
Conclusion ......................................................................................................................................... 11
INTRODUCTION

With the rise of mobile and social technologies, customers are more knowledgeable and empowered than ever. Their ability to access and share information anytime and anywhere gives them enormous control over their interactions with the companies they do business with—and they know it. At the same time, consumer applications like Facebook, Siri and Amazon Echo are building artificial intelligence (AI) into their services, creating great customer experiences. As a result, today’s customers expect data-driven, personalized interactions at every stage of their journey with any organization.

Frost & Sullivan research shows another trend in customer engagement is the shift from traditional to digital interactions. Traditional voice—a high-touch and high-cost channel—keeps customers close, but today’s buyers are moving toward self-service and other automated channels because they want easy access to information on any device and from any location. However, not all self-service channels are created equal—and that’s where advanced capabilities like artificial intelligence, data analytics and automated bots come in.

Meanwhile, agents want to offload the mundane tasks that lead to boredom and churn. By automating basic processes with AI, companies allow agents to work on the high-value interactions that keep them interested in and valuable to the organization.

Given these trends in customer expectations, businesses must leverage artificial intelligence to automate more customer engagements through:

- Web/mobile self-service;
- Chatbots and virtual assistants;
- Automated SMS, proactive outbound contact;
- Desktop automation (including logins and call wrap-up time dispositions); and
- Guided agent assistance and robotic process automation.

The goal: Leveraging real-time and historical information on the customer to deliver a contextual, relevant and highly personal experience. In the process, companies can lower costs, drive customer satisfaction and improve agent morale.
AI TRANSFORMS THE CUSTOMER SERVICE METRICS THAT MATTER

As its name suggests, digital transformation is changing how companies operate—and the contact center is among the most measurable areas for success. A big part of this effort revolves around artificial intelligence, which can dramatically improve the customer experience by automating mundane processes and applying context and cognition to more complex interactions. This ensures customers get the information they need quickly and accurately, and it helps agents deliver maximum value whenever and wherever they engage with customers.

Better still, AI can dramatically improve the key performance indicators (KPIs) on which contact centers are measured. This includes everything from the time it takes for a contact to be handled (first-response times, abandonment rates, blocked calls, time on hold, etc.) to call quality and efficiency (service levels, first-call resolution) to customer and agent satisfaction. Intelligent self-service helps companies handle more contacts more quickly, while data-driven analytics ensure agents can offer a more effective and satisfactory experience.

In short, AI can transform the metrics that matter most to you and your contact center: call deflection, FCR, agent productivity, agent attrition and even CSAT, NPS and CLTV.

AI in the contact center isn’t the stuff of sci-fi; machines will not replace humans any time soon, if ever. Instead, the objective for leading companies that are deploying AI is to augment and enhance experiences for customers and agents. Artificial intelligence enhances the customer support experience through natural language processing (which makes it possible for computers to understand actual human speech; think of it as the voice recognition you always wanted) and machine learning (which enables applications to continuously improve their programming based on real-world interactions and data). Exponential, practical advances in AI solutions that are integrated into the customer record and interaction history allow the system to interact with your customer data and provide “intelligent,” contextually relevant self and agent-assisted service.

AI CAN AUTOMATICALLY POPULATE CASE FIELDS, THEN CLASSIFY AND INTELLIGENTLY ROUTE CASES TO THE RIGHT AGENTS. THIS EMPOWERS CUSTOMERS TO SELF-SERVE QUICKLY AND EFFICIENTLY WHILE ENABLING AGENTS TO DELIVER A CONNECTED, PERSONALIZED, INTELLIGENT AND SEAMLESS SERVICE EXPERIENCE AT SCALE.
Many companies initially use AI to automate the simple, repetitive processes that are the backbone of any contact center. AI helps companies manage those tasks more intelligently by using historical and real-time information to contextualize every interaction. More importantly, even during human-driven interactions, AI can handle the mundane tasks that are required during every exchange, such as collecting contact information and incorporating data related to the problem at hand. It can then pass that information along to agents, who can approach the customer with knowledge instead of basic questions. Not only does this position the agent to jump right in with advanced help, but it also appeases the customer, who is tired of constantly having to repeat the same information on customer service calls.

Regardless of channel (voice, chat, SMS, social), the agent can then leverage that information to deliver a more personalized and complete experience. For example, AI can give the agent relevant data about the customer’s history with the company, as well as any steps the agent has taken to resolve this particular issue (including self service). That can help the agent resolve the problem at hand and develop a deeper and more personal relationship with the customer, and even turn a negative experience into a positive one.

Artificial intelligence can also help contact centers be more proactive, allowing agents and bots to anticipate customers’ needs—sometimes before even the customers realize they exist. AI can recognize that a high-value customer is searching a self-help site and offer live assistance earlier than it might in other situations. AI can also analyze incoming contacts to determine how important they are and then move them up in the queue accordingly. Once contact has been made, AI can help agents by searching databases, GPS and any other relevant information sources to contextualize the interaction—say, by letting the agent know that the customer’s phone service is, in fact, being repaired. It can even use historical data to anticipate when a customer might need service and support and reach out ahead of time with an offer, saving the customer from making the effort and lowering costs for both parties in the process.
AI can also help managers improve the customer experience going forward, based on real-world information. By recording calls and running them through a language processor with AI capabilities, companies can learn not just what was said and done, but also whether the customer was likely to be satisfied and is a good candidate for a follow-up contact or up-selling, and where room for improvement lies.

**SELF SERVICE: REDEFINING THE NEW NORMAL**

Smart companies are embracing self-service channels because customers want them and because they are often more cost effective than traditional contact center interactions. By making it easy to get detailed information on products and services online or via mobile apps, companies can lower costs and turn the contact center into a revenue generator as they meet consumer demand around the clock.

But not all self-service channels are effective, and if they’re not handled correctly, they can cost companies money. Even today’s digital-savvy consumers are not always satisfied with self-help options. This is especially true when they can’t get the information they need quickly and accurately. And in this day and age, it won’t take long for them to switch to another company with a single click.

Luckily, artificial intelligence and automation are changing the game. AI-powered bots can be integrated with customer communities, mobile apps and social sites such as Facebook Messenger and WhatsApp to help customers help themselves by resolving routine requests, increasing call deflection, and reducing costs and average handle time (AHT). By using bots with built-in AI capabilities like NLP, in particular, companies can ensure other KPIs will also see improvement, including call abandonment rates, average hold times and the percentage of calls blocked. That’s because unlike human agents, bots can handle as many contacts as come in—they simply “multiply” to meet the need.

The key here is giving the AI-powered bots context—that is, giving them access to historic and real-time information that allows them to respond and react to customers within the context of the current interaction. This can be done even in so-called static environments, like FAQ pages and websites, by programming cookies to track a customer’s search activity and connecting his log-in or username to the relevant back-office records. In interactive channels, such as web chat, bots can leverage contextual data to shape their responses to customers in real time, making it more likely they will quickly satisfy customers’ needs.
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For example, a customer visiting a company’s website for information on his cable service might search for certain keywords: channels, service outages, tech support. If the system recognizes that the customer is from a certain location, it can immediately check to see if the provider is experiencing an outage in the area and send a pop-up box letting the customer know when service will be restored. Or, if the customer is looking for information on an NFL package, the system can suggest an offering that delivers complete coverage of the customer’s likely “home team” as well as related specials on other sports teams or events. If the bot is unable to resolve a request, it can seamlessly escalate to an agent, including all relevant, contextual information.

Online Self Service
- Knowledge Base
- Product Registration
- Order History
- Service Ticket
- Seamless Transition to Assisted

Communities
- Forums
- Crowdsourced KB
- Ratings and Reviews
- Q&A (FAQs)
- Blogs
- Seamless Transition to Assisted

Digital Assistant
- AI/Predictive
- Voice Assisted
- “Blended” Agents
- Personalization
- Avatars
- Seamless Transition to Assisted

Making it easy for customers to escalate a self-service interaction to a live call or chat is critical to the modern contact center experience. Companies that don’t back up their self-service options with human-led channels will almost certainly lose business. Instead, they must embed real-time updates and communication into the self-service experience, allowing customers to escalate to a human being as soon as the need arises. Additionally, companies may decide that certain interactions—high-value or complex sales, service calls from key accounts—must always be handled by a human agent. AI can ensure those interactions are properly routed from the start and then offer contextual information to make them better.

In the process, companies must integrate their self-service and human-assisted strategies to create joyful experiences that deliver seamless service from start to finish. Here, too, AI plays a role. If the self-service system is programmed to hand off all the information associated with a given interaction, the agent won’t have to burden the customer by asking him to re-enter his basic contact details or even the nature of his problem—the agent will already know exactly what’s going on. Then, the AI can keep working in the background by monitoring the call or chat session and offering suggestions to the agent as new information is revealed, all the while leveraging existing and real-time data on the customer to truly personalize the experience. This will ultimately lower the amount of time the agent spends on the interaction while improving its effectiveness and time to resolution.
AGENT EXPERIENCE: BOOSTING PRODUCTIVITY, RETENTION AND CUSTOMER SATISFACTION

The biggest challenge contact center managers face isn’t customer satisfaction—it’s maintaining agent morale and thereby lowering absenteeism and turnover, and their associated costs. In supporting remote agents, many companies have already taken steps to ensure they can hire the best workers, regardless of location, and offer contact center employees better work/life balance. But they are ignoring the biggest challenge agents face: boredom from handling routine tasks.

By moving mundane processes like data entry and basic search to automated systems, and leveraging AI to make contextual exchanges easier, companies empower agents to work on higher-level, more interesting tasks—thereby increasing morale and reducing churn. As an added bonus, companies will see significant improvement in KPIs, too: increased customer satisfaction scores and higher revenues per customer, as well as lower turnover and absentee rates.

Still, changing your view of the contact center requires two key elements: a culture change within upper management and a C-suite that embraces the shift and the technology required to enable it, and a culture change among the agents themselves, who will be required to take more proactive action, regularly think on their feet and make the transition from support to sales. The latter will almost certainly require training and ongoing support, not just on new AI tools but also on what it means to be a successful contact center agent in today’s world.

One critical component of leveraging AI in the contact center is to train employees on the new technology and then let them run with it. It’s almost counter-intuitive, but intelligent automation is only valuable when people are free to use the resulting information to inform complex interactions and then take appropriate action in the moment. That means agents need to get away from pre-written scripts and instead react to help customers on the fly, in whatever way possible. Companies will need to start thinking more in terms of ranges—say, a customer that spends X dollars can be given Y leeway—and less in terms of strict policies and regulations.
Luckily, AI can help with that, too. By programming allowable leverage into the system, contact center managers know their agents will never give away the store. For example, if the system recognizes that a given customer ranks in the top 10% for spend, it can recommend the agent offer to send a replacement overnight, offer a deeper discount on a new product or include more bundled services in a subscription. Or, if it senses a change in tone in the customer’s voice on a call or text, it can suggest ways the agent can lower the temperature of the exchange or hand off the call to a supervisor.

Research shows that complex customer issues demand an agent who can calmly control the conversation and lead that customer to a solution that works for the company and the consumer. These agents develop an almost intuitive sense of what customers need while remaining cognizant of the constraints the company is under. They are in the best position to leverage information provided by AI to personalize the interactions and help resolve difficult issues to everyone’s satisfaction. Contact center managers are wise to identify such employees and then ensure complex contacts are routed to them. This, too, is aided by AI.

Finally, companies can expand their service reach, boost customer satisfaction and increase revenues across the organization by directing customer service agents and back-office experts within the larger organization to proactively answer customer questions. By giving customers and agents access to experts, companies can better ensure problems are solved quickly and effectively while freeing up agents to handle more, and more typical, contacts as they come in.

**ADVANCED ANALYTICS: TURNING A COST CENTER INTO A REVENUE CENTER**

For as long as contact centers have existed, they’ve been treated as cost centers—a necessary evil that pulls resources from the organization. As a result, their guiding principle has been cutting those costs. After all, if your business unit does nothing but spend money that would otherwise go to the bottom line, the only way to improve outcomes is to reduce that spend. Thus, many KPIs merely measure costs: average handle time, first-call resolution, occupancy rate and so on.

Unfortunately, reducing costs is also one of the main reasons companies deploy automated technology to replace more personal interactions. FAQs, bots and AI are often sold on the basis of costing less than human-driven alternatives. The problem with this thinking is it ignores the role the contact center can play in delivering revenues to the organization. By leveraging the data constantly coming into the business, agents and AI can recommend information, best practices and cross-sell/upsell offers, increasing agent productivity and CSAT scores. Better still, this turns agents into sales reps, increasing their value and that of their customers.

Most companies realize that when customers contact a business with an inquiry on a new product or service, it’s a missed opportunity to let them leave without offering other products to help up-sell the deal. But that is also true of customers who contact a business with a problem; often, they, too, are ripe for a revenue boost.

For example, a customer who has contacted a tech company for the third time trying to resolve a performance issue might react positively to an offer for 50% off the newer model, plus access to upgraded service for one year. Likewise, a mother calling into a clothing company to ask if she can replace a dress coat she ordered for her son with a larger size so he’ll have it in time for an upcoming performance might want to hear about a music-themed tie or respond positively to an offer for an annual reminder that her growing son might be ready for a larger jacket. AI can suggest these options to the agent, who can then turn a potentially painful situation into a profit for the company.
How to Get Started with AI in the Contact Center

- Assess how your agents work:
  - What they love, what they don’t
- How long it takes to find information
- How many systems they use in a day
- What’s required for case intake
- Identify the metrics that matter most for your organization.
- Support the channels that matter most for your customers.
- Capitalize on your customers’ common questions to create automated replies.
- Choose a provider that has built AI into its customer service and CRM applications.
- Use analytics to measure success and deliver actionable insights.
- Use data to iterate for success.

Of course, all this will take renewed training for supervisors and agents, who are not, after all, experienced salespeople. Start by helping reps identify the heart of the problem and teaching them how to turn a challenge into an opportunity. This means looking at the contact centers’ traditional KPIs and understanding what the new expectations are from a revenue perspective. These might not be hard targets so much as achievable goals. (Contact center managers must also look at how they reward agents with commissions and bonuses for this additional work.)

Predictive analytics and advanced AI are key to success here, too. Agents will rely on your system to show them exactly who every customer is, make recommendations for cross-selling and up-selling opportunities, and involve supervisors or actual salespeople as needed.

And don’t forget about follow-up. Artificial intelligence tools can track what customers do after a purchase by tracking not just proprietary data but their online life in general. Did they tweet about their new product or service? Did they look for support from your self-help website? Did they search your store for accessories or related products? A good AI solution will alert customers to new offerings or specials based on their reaction to the goods and services they already own, sometimes suggesting special deals based on their social clout or history with the organization.

Connecting your contact center with your CRM system can also generate big rewards. Your CRM data holds a wealth of information on your customers—from their history with the organization to their value to the company. Surfacing that data—and then making predictions and suggestions based upon it—will help agents personalize every customer interaction and generate higher revenues per account. Likewise, it’s helpful for salespeople to see when a customer has reached out to the contact center with a problem or concern to follow up or incorporate that information in the next discussion.

WHAT TO LOOK FOR IN A PROVIDER

Many vendors sell artificial intelligence and advanced analytics tools for the contact center, but as with any technology, a close vetting process is a must. The most important consideration is whether the software is designed with AI baked in or just tacked on as an afterthought. That’s because the old mantra is true: bad inputs will yield bad outputs. Put another way, an application’s analyses and intelligent recommendations are only as good as the data upon which they are based.

It’s also critical to look for an end-to-end solution that will deliver all the capabilities you need with seamless integration and interoperability to ensure
excellent data capture and exchange. In doing so, agents and bots will have access to the full customer data set. Your software should encompass:

- A range of standard contact center applications;
- Robust self-service capabilities (including customer communities);
- Integrated analytics and AI;
- Support for all digital channels (mobile and social); and
- Connections to an integrated CRM suite.

A platform-based approach will ensure you always have a 360-degree view of the customer—on any channel and any device. Your chosen solution should make it easy to personalize every interaction, using AI to drive automated and human interactions in ways that make every customer feel valued and understood. It must leverage analytics to deliver contextual recommendations for service and support, as well as new product offerings. And it should match service channels and levels to the need at hand.

**CONCLUSION**

As the market changes in the face of digital transformation and new customer expectations, smart companies are turning to advanced analytics and artificial intelligence to improve KPIs, reduce agent and customer churn, and turn the contact center into a revenue generator. Companies should use AI-powered bots to deliver smart, contextual self-service support and leverage AI to give agents a complete, personalized picture of every customer and every interaction in real time. That way, companies can deliver on their mission to increase productivity and profits while reducing costs.

When selecting a provider, contact center managers and IT execs should look for an end-to-end solution that has been designed from the ground up to incorporate AI throughout the platform. It should also support all traditional contact center capabilities, a range of digital channels, and easy integration with CRM and other back-office applications.
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