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The Smart Guide to Conversational AI for Customer Service

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Introduction

"Hi, I'm AssistBot! 👋 How can I help you today?"

When you're shopping online and you see this at the bottom of your screen, what do you do?

Chances are, you click the "X" and go about your business.

Chatbots are supposed to help customers find what they're looking for. But most of the time, they don't help at all. Between their schmaltzy greetings and their ability to pop up when you least expect them, chatbots have given their parent category—Conversational AI—a rather limited representation it doesn't deserve.

Conversational AI is often thought of as the "technical term" behind these bots. Anyone who's been embarrassed by Siri or annoyed by chatbots rightly has some concerns about using this technology for customer service.

The truth is, conversational AI refers to any AI-powered technology that can engage in human-like dialogue.

In this e-book, we'll walk you through the business and organizational impact of using conversational AI for customer service. We'll break down how it recharacterizes customer support, what kind of business outcomes to expect and why conversational AI might benefit your brand.

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1. What is conversational AI, Really?

Conversational AI refers to any AI-powered technology that can engage in human-like dialogue.

When you ask Alexa to order paper towels or describe a problem to an automated phone system or message a company on Facebook after business hours, you're engaging with conversational AI.

In 2016, Gartner predicted that by 2020 we'd be having more conversations with chatbots than with our spouses.[1]

Whether or not that prediction aged well, it's still likely we interact with conversational AI products more often than we realize.

Here's a few examples of what leading conversational AI solutions can do today:

- Answer simple or open-ended customer questions
- Pose questions to the customer
- Automate inbound or outbound customer communications
- Complete processes using customer input (e.g. set appointments)
- Route customers to the right department
- Converse over SMS, email, voice, web or social
- Integrate with backend help desk and CRM systems
- Automatically create tickets and update statuses

But perhaps the best thing conversational AI can do today is meet the customer in their channel of choice. A customer can start a conversation over text and pick it up later over email within the same communication flow. As you can imagine, this capability has enormous potential to reduce handover friction and confusion that's all-too-common.

In summary, modern conversational AI has a better understanding of the human language than often given credit for. Far beyond just a proxy for simple Q&A, enterprise-grade products can perform complex inbound and outbound requests, complete cross-channel communications and automate nearly any text-based interaction.

1. Gartner, Gartner's Top 10 Strategic Predictions for 2017 and Beyond: Surviving the Storm Winds of Digital Disruption

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Conversational AI Under the Hood

To help you better understand conversational AI's capacity for natural language, we'll quickly take a look at its underlying technology with a lens for customer interactions.

Conversational AI uses a combination of machine learning (ML), Natural Language Processing (NLP), Natural Language Understanding (NLU) and Natural Language Generation (NLG).

Machine Learning

TL;DR: ML studies the context of customer questions and learns how to generate appropriate answers.

ML systems are how conversational AI products "learn" to comprehend and speak in human language. These products are created by feeding customer language datasets—think of this as a word bank containing common questions, dialogue and phrases—to a neural network (a set of algorithms designed to recognize patterns). Neural networks "study" the dataset and learn to identify combinations of words that indicate intent.

Natural Language Processing

TL;DR: NLP is how conversational AI recognizes customer intent and executes the requested task.

If you've ever learned a second language, you'll know that being able to read and being able to converse are different levels of mastery. The same is true for conversational AI. Recognizing language; comprehending meaning is another. NLP helps conversational AI understand conversations and execute based on speaker intent by converting text into structured data computers can understand. Because of NLP, a chatbot can recognize two customers asking "What number do I call to file a claim?" and "How do I reach my claim agent?" might be expressing slightly different questions. The chatbot can then ask a clarifying question to the second customer like "Do you already have a claim in progress?" in order to extract the information it needs to complete the request.

Natural Language Understanding

TL;DR: NLU is an advanced subfield of NLP that catches more subtle inferences the latter might miss.

Natural Language Understanding uses grammatical and linguistic rules to distinguish meaning from more complex communication. A chatbot that uses NLU can identify the differences in the sentences: "I canceled my order, do you give refunds?" and "You canceled my order, do I get a refund?" Traditional ML algorithms would flag "cancel" "order" and "refund" as important but would ignore "you" and "I" (they're considered stopwords, meaning they're filtered out of language processing). But with NLU, the chatbot understands how the words "you" and "I" are connected to the rest of the sentence, and flags them as important.

Natural Language Generation

TL;DR: NLG is how conversational AI speaks back to us.

Natural Language Generation describes the process of how computers can sound like humans and not like a scripted response. Advanced conversational AI products can use NLG not just to automatically deliver logical answers to queries, but to engage with the customer. When integrated with a business' back-end systems, conversational AI can incorporate relevant data in its responses. For example, NLG products can reach out to ask customers for missing information (like their account name) or supply customers with necessary data (like their tracking number).

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2. Do I Need conversational AI?

So now you've finished reading about the difference between NLP, NLU and NLG and you might be thinking, "Okay, but how does this actually fix my problems?"

Or maybe you've skipped the first chapter entirely because you need to know whether conversational AI will benefit you before you read any further. That's fair too.

In any case, there are three questions that can help you diagnose if conversational AI is the right technology for your customer service.

Do You Have Ongoing Interactions with Customers?

The key here is whether you're incentivized to continuously deliver good experiences to keep your customers. If your business model is based around one-time purchases, you roll out the red carpet to get the sale—once the deed is done, the regular communication subsides. Businesses that maintain ongoing customer interactions tend to be in high-contact industries or be B2C "subscription based": meaning that the customer is billed with a short-term cadence.

Examples of ongoing customer interactions:

- Service billing claims
- Scheduling
- Order processing
- Inbound/outbound email, snail mail, text or voice communications

Examples of high-contact/B2C industries:

- Financial services
- Insurance
- Healthcare
- Utilities
- Telecomm
- Travel
- Retail

Are You Enterprise-scale?

Enterprise-scale is an important qualifier to the "ongoing interactions" question. Your local grocery store maintains regular relationships with its customers. It's also B2C. But it's not high-contact—the volume of outbound/inbound communications it maintains is nowhere near the level of a global e-commerce brand. That grocery store might still benefit from automating its customer support services. However, it's at the enterprise-scale where conversational AI adds the most value.
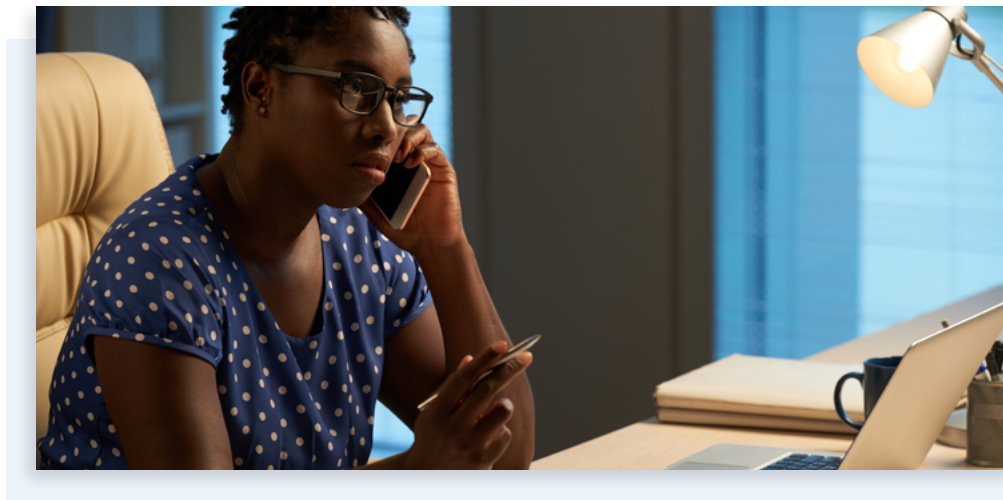
Do You Have at Least One Customer Communication Channel?

This is sort of a trick question. If you're interacting with customers regularly, you're obviously using at least one channel to do so (even if that channel is snail mail).

The point is, if you use a customer communication channel, that means you've already set up an inbound/outbound customer service infrastructure. If you have that infrastructure in place, it's easy to move communications from an inefficient channel to an automated channel (again, even if that channel is snail mail).

Examples of customer communication channels:

- Voice
- Live chat
- Text
- Email
- Mobile Apps
- Web
- Social media
- Snail mail

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3. Best Customer Service Use Cases

You can plug conversational AI into your customer support for faster customer onboarding, better retention rates and shorter claims cycles. It can also certainly deflect calls and automate rudimentary interactions at a massive scale. These are all effective use cases, but conversational AI shouldn't be limited to these areas.

Engagement

The number one use case for conversational AI is **customer engagement.**

It may seem counterintuitive to use artificial intelligence to supercharge your engagement methods. But think of it this way: frictionless interactions go a long way. Customers want help quickly—whether that's from a human or a platform that's specifically designed to serve them is less important.

In particular, if you're in an industry that interfaces with customers who are often stressed or scared, the moments of engagement with your brand can be make-or-break points in a customer's loyalty.

For example, think about a customer who has to call their insurance company to report a car accident. Which sounds like a more positive experience: talking to a human after navigating phone menus and being placed on hold for 20 minutes... or texting an automated service desk that can file the claim in 30 seconds? SMS outbound/inbound support can make a world of difference to on-the-go customers. No login or desktop required—just help when they need it.

If you're still not convinced, conversational AI's ability to personalize customer experiences should tip you over the edge. Lots of businesses forget about customers until their renewal periods roll around. Consider the impact to customer retention if you could automate giving them a small gift on their birthdays or renewal anniversaries.

It is anywhere from 5 to 25 times more expensive to acquire a new customer than it is to keep a current one.[2]

2. **Harvard Business Review,** The Value of Keeping the Right Customers.

Understanding Conversations

Conversational AI's second best utility is understanding conversations. At a narrative level, you get to know your customers through insights derived from thousands of messages. Some modern conversational AI platforms provide dashboards that analyze and report on user insights like application performance, campaign completion and other KPI metrics.
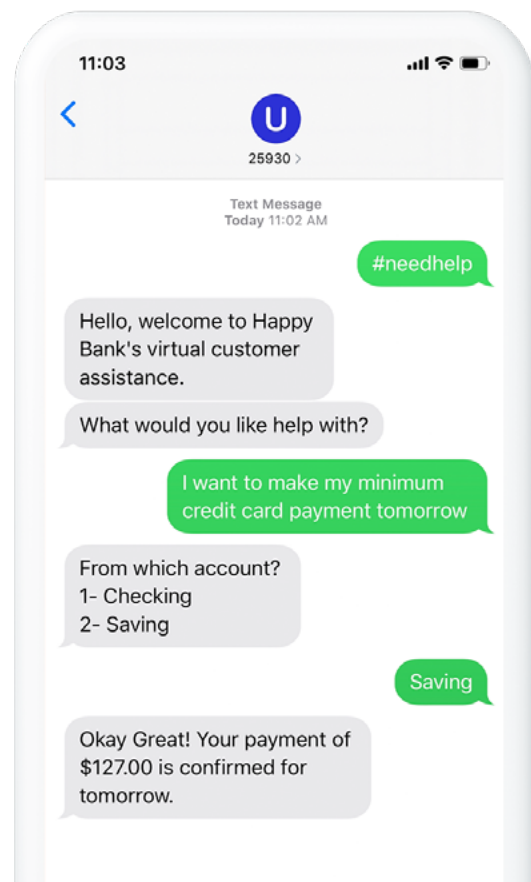
At a magnitude level, conversational AI powers your customer service at an unbelievable scale. Think converting hundreds of voice calls to text, or parsing through thousands of emails and routing them to the right departments.

You can identify the best use cases for your business by recognizing your high volume drivers.

High volume drivers are interactions that eat up your customer support time.

These can range from simple confirmation questions like: "Did you get my fax?" "What's my balance?" or "Where's my order?" (WISMO) all the way up to complex interactions where the customer needs to deliver data that can't be verbally communicated, such as a form or a photo.

By automating these interactions, you can expedite or eliminate processes that drain time, budget and employee energy.

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4. Customer Service Benefits & Impact

Customer service roles, historically, have not been linked to the highest levels of job satisfaction. Reps are frustrated because customers are frustrated. Customers are frustrated because they have to wait 20 minutes to ask a simple question.

At the highest level, when you bring in a conversational AI platform, you can drastically improve your customer service experience. Here's how:

Help Customers Faster

Simple confirmation questions make up a big majority of inbound customer requests, but just because they're simple doesn't mean agents can breeze right through them. Support desks still have to open a ticket, assign it to an agent and update the status until it's closed out. Every step contributes to customer wait times. Customers get the help they need much faster when conversational AI platforms take care of the legwork and simple Q&A for you.

Superpower Your Reps

Conversational AI that can execute both outbound and inbound communications means your agents never have to reach out to customers to ask for more information or remind them about upcoming appointments. A few conversational AI products offer easy analytics dashboards so reps can A/B test campaigns to maximize engagement. They can review conversion rates to see exactly what workflows are effective and quickly adjust ones that aren't working.

Make Customer Service Roles More Satisfying

It's not uncommon for call centers to see 50% attrition in a year. With the cost of training and recruiting, you're losing a lot of money every time you lose an agent. When you eliminate the repetitive, routine work that makes customer service such a churn-and-burn experience, agents can focus on more fulfilling interactions. Not only does this reduce churn, it raises the bar for customer service: your agents can be solely dedicated to delighting the customer.

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5. Business Benefits & Impact

In addition to the customer experience benefits, conversational AI also drives two varieties of business results.

Better Service = Happier Customers

The faster you address their concerns, the happier the customers. In insurance, for example, it might take two or three weeks to resolve a claim. With conversational AI automating the manual data entry and back-and-forth, that claim can be resolved in a day.

The majority (66%) of adults feel that **valuing their time** is the most important thing a company can do to provide them with good online customer experience.[3]

Obviously, "happier customers" is sort of an indirect benefit, but it does break down to real business benefits. Take this story for example.

One large insurance company decided to automate its claims servicing using two-way SMS. The claims process took three weeks to complete, with agents making six attempts to reach customers by phone. In its first year deploying conversational AI, the company converted its outbound calls into 70,000 automated text messages per month. The results were dramatic:

85%	50%	90%
overall campaign engagement rate	of customers completed within five minutes	completed within one hour

3. Forrester, 2018 Customer Service Trends: How Operations Become Faster, Cheaper — And Yet, More Human

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Other enterprises using conversational AI saw similar results:

- Raised NPS scores by 9%
- Cut email processing from days to seconds
- Cut queue times from 15 hours to one minute

Reduced OpEx = Happier Employees

Companies that make a concerted effort to improve their customer experience also see employee engagement rates go up by an average of 20%.[4]

Service agents who spend more time solving meaningful problems for customers and less time completing menial tasks are happier employees. The main business benefit to conversational AI is happier employees—but reduced OpEx is another sub-result.

In chapter three we talked about how conversational AI slashes high volume drivers. Let's take support calls as an example. Typically, every call costs you between $12-17. Lowering call volumes has an impact force on operational expenses.

*One large enterprise using conversational AI reduced **outbound** calls by **94,000+ per year**.*

We're talking about reducing OpEx spending not in the thousands or even hundreds of thousands—we're talking about saving millions of dollars every year—and that's on just one call driver.

Enterprises using conversational AI recorded similar metrics:

80%	14%	8x
OpEx reduction	**reduction in agent attrition**	**less processing time**

Time is money, so there's also the impact to top line revenue to consider. In the shipping industry, for example, if a customer emails requesting a quote it takes businesses (on average) 57 hours to respond. Conversational AI can automate quote processing in 5 hours. Getting 90% of your time back and being 90% faster than your competitors drives an outsized advantage.

4. McKinsey, Customer Experience: New Capabilities, New Audiences, New Opportunities

6. What Kind of conversational AI Do I Need?

In the huge marketplace of chatbots and AI frameworks, how do you identify what kind of product will drive the most value for your business?

Generally, if the tasks you're looking to automate involve talking to a customer, customer-facing conversational AI will be a good fit.

If you're trying to automate between customer-facing communications and your CRM, you need a more modern conversational AI platform that can integrate with backend systems like billing, claims, quotes and more.

You can refer to the chart below for a basic breakdown of your options. Generally, there are three main elements to consider when weighing conversational AI products.

Ease of use

Is the platform something your IT team has to study for 6 months, or can your operations team get the hang of it in a week? You'll tend to experience a longer time to value with technically complicated products. Spending millions of dollars on a complex system that takes 15 months to produce any benefits is not a wise investment.

Robustness

Can the platform accomplish complex tasks? Can it integrate customized business rules into its automation?

Vendor accountability

How good of a partner is the vendor? Does the vendor understand how to implement the solution to meet your business goals?
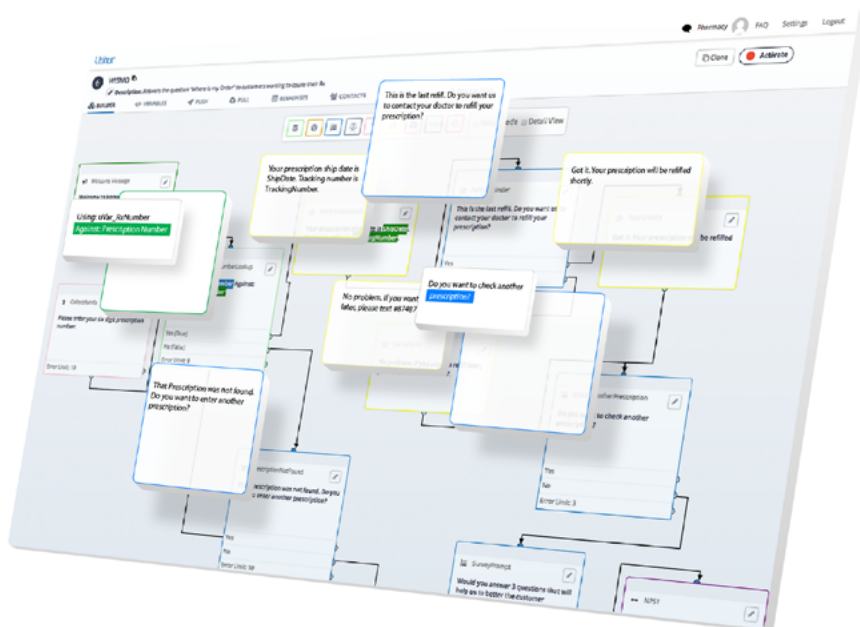

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Conversational AI Product Options

A quick exploration of the various types of conversational AI products.

	Chat Bots	**RPA Bots**	**AI frameworks**	**End-to-end Automation Platforms**
Description	AI-point solutions for customer and sales support	Software that automates back-office tasks	Cognitive computing system that answers questions in natural language (i.e. IBM Watson)	Manages customer engagement workflows from beginning to end (customer to CRM/backend systems)
When to use	Inbound conversations started by the customer in captive channels (web, social, app)	High-volume transactional processes such as manual data entry, communicating with external systems	Raw data organization, understanding unstructured data at scale	Outbound or inbound conversations, omni-channel customer interactions, high volume call or email processing
Advantages	24/7 availability, can deflect calls, streamlines FAQ-based interactions, reduces customer service strain, can handle multiple customers at once	Eliminates human error, expedites lengthy menial processes, can improve job satisfaction	Interprets and enriches unstructured data, visual data recognition, can connect customers to human agents (unlike chatbots)	Supports the full customer journey, works out-of-the-box, intent-based classification, backend integration, supports language translation (select platforms)
Disadvantages	Can only be programmed to perform one task, can't initiate conversations, may not be advanced enough to answer all queries, can't handle complex rules and decisions, may not be omni-channel (most don't do SMS)	Not customer-facing so not considered true "Conversational AI" technology (grouped as such because of its automation capabilities). Implementation can be complex	High migration costs, deep implementation process, can be too technically complicated for Ops teams to use	Two-way platforms (customer and backend) involve buy-in from business and IT teams, planning of specific automation tasks required

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7. How Quickly Should I See Results?

Your implementation and time-to-value benchmarks depend on various factors. Naturally, platforms built with drag and drop tools and user-friendly UI will be picked up quicker than more technically complicated ones. More complicated solutions will also require more budget to build out. Some RPA solutions require another $10 in consulting fees for every $1 you spend on the product.

Time to Implement

Expect to spend 1-4 months implementing a conversational AI platform. If you don't have complex integrations, you can be up and running in a month. More complex implementations—ones that depend on integrating with backend systems and the availability of certain AI models — fall in the longer range.

Time to Value

Time to value can be 0-3 months after deployment for less complex systems and anywhere between 3-15 months for complex systems that require a lot of IT or consulting resources.

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8. Getting Started with conversational AI

The decision to adopt conversational AI (or not) doesn't have to be an arduous one. Here's how to break down the process.

Audit Your Current Approach

Start with discussion. In what ways do you want to improve your customer service process? What are your goals for customer engagement? Then, do an informal audit of your high volume, low effort interactions. Those friction areas will become your first target for conversational AI transformation.
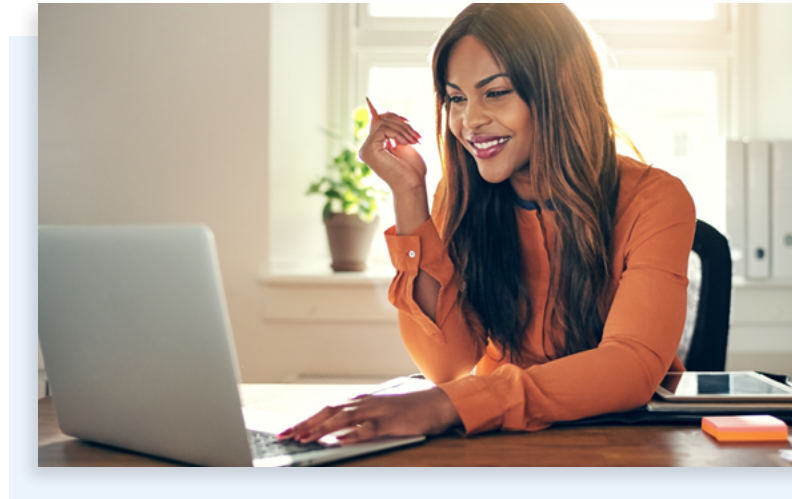
Put Yourself in Your Customer's Shoes

If you were your customer, how would you prefer to communicate with your brand? If you'd rather file taxes than call your own support line, consider offering customers various digital channels. Think about the persona of your customer. In what kinds of settings or moods do they usually interact with your brand? Someone calling in from a remote location with an emergency will have very different needs from someone at home checking off their weekend to-do list.

Implement & Iterate

You can't measure success without clear metrics. Once you've figured out the area you want to target, set KPIs with your conversational AI vendor. Define what your new flow will be in the POC.

At Ushur, we use an iterative process to prove KPIs. We start with a quick workflow that's easy to automate. When we see value, we iterate with a bigger project. That enables our partners to more clearly assess impact before they decide to implement on a larger scale.

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About Ushur

Easy to use and built for engagement, Ushur is the first **automation platform** that understands the customer's needs—and yours.

The writers of this guide understand your pain points. If this sounds like you:

- NPS and C-SAT scores need some love
- Customer interactions take too long to complete
- Can't reach customers by phone
- Customers drop off when switching channels
- OpEx costs are mounting, threatening revenue

Then let's talk.

Ushur's conversational AI platform:

- Intelligently engages customers over virtually any channel
- Makes customer service reps more efficient by gathering routine information and communicating with back-end systems
- Lets customers engage with you on their own time and through their preferred channel
- Enables design-your-own automation workflows with easy drag-and-drop tools
- Supports 60+ languages and simple to complex use cases

Designed for high-contact industries like insurance, logistics and financial services, Ushur engages customers over email, apps, SMS and more, using conversational AI and intuitive workflows to understand what people are saying and what to do next.

Its end-to-end automation platform accelerates time to value with features like a visual builder, powerful tools for data extraction, and integrations with backend systems like Salesforce, ServiceNow and even homegrown, legacy systems. Learn more ›

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The Complete Solution for Intelligent Automation

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