



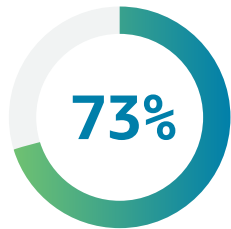
Unlocking customer experience innovation in contact centers

How machine learning streamlines operations,
reduces costs, and improves the customer experience

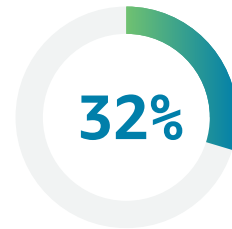


Improving customer experience boosts your bottom line

A good customer service experience can have a significant impact on business performance. Efficient, responsive contact centers are key to building customer loyalty and preference. Machine Learning (ML) helps on both fronts, reducing time to resolution and providing deeper customer engagement insights.



73% of individuals cite customer experience among their top three purchasing decision factors, behind price and product quality.



32% of customers would stop doing business with a brand they loved after one bad experience.

Businesses are taking advantage of Artificial Intelligence (AI) and Machine Learning (ML) to improve the customer experience for both customers and contact center agents. ML is transforming contact centers by automating issue resolution processes and enabling relevant, intelligent, real-time content delivery to agents and customers across channels. Faster, more effective service, with enhanced personalization, helps win and retain customers, reduce agent churn and drive revenue growth.

↑ 4%-8% Revenue growth above market with excellent customer experience²

¹ <https://www.pwc.com/us/en/services/consulting/library/consumer-intelligence-series/future-of-customer-experience.html>

² <https://www.bain.com/insights/are-you-experienced-infographic/>

Turn your contact center into a profit center with machine learning

AI and ML help solve key contact center challenges, improving customer experience, increasing agent effectiveness, and reducing expenses.

How AI and ML boost contact center performance



Increase customer satisfaction

- Service customers' routine needs with intelligent, conversational voice and chat bots
- Reduce call queues
- Route callers to the right agent, right away
- Improve first contact resolution – by providing the right information, at the right time through the customer's preferred channel
- Deliver personalized experiences



Increase agent productivity

- Reduce call volume
- Automatically verify customer identity and recommend content to agents in real time to quickly resolve customer issues without having to manually search
- Enable real-time support assistance prompts for agents



Increase business performance

- Reduce costs with self-service technologies
- Increase performance through better insights on customer satisfaction, potential product issues, and agent training effectiveness
- Deliver faster, more personalized, customer service, leading to higher NPS/CSAT scores



AI or ML: What's the difference?



Artificial intelligence (AI):

Any technique that enables computers to mimic human intelligence using logic, if-then statements, and machine learning



Machine learning (ML):

Subset of AI that uses machines to search for patterns in data to build logic models automatically

Source: <https://aws.amazon.com/machine-learning/what-is-ai/>

Deliver a superior experience with ML

Build customer loyalty and agent satisfaction with every interaction

Customer pain points	Machine learning deployment	How machine learning helps
Unable to engage on channels of choice	Omnichannel engagement	Customers can interact through their channel of choice: voice, email, website, WhatsApp, iMessage or chatbot. New technologies can enable two-way conversations over SMS and third party social and messaging apps (Facebook Messenger, Twitter, Line); push notifications; and analytics dashboards to monitor and track chat message activity.
Ineffective self-service options	Automated self-service with natural language understanding (NLU)	Automates the customer self-service experience with advanced conversational chatbots, voice, or IVR applications that automatically discovers customer intent and the information needed to respond, so customers get answers more quickly. If questions do need to transfer to a live agent, all information is passed on, eliminating need for customers to repeat themselves. As conversational AI has evolved, natural language speech to text AI are increasingly handling more complex interactions via chat and voice with multiple language support.
Inconsistent, impersonal agent interactions	Personalized service using unified customer information	Customer profile data designs gives agents customer information before the conversation starts, so they can personalize the experience.
Multiple transfers between agents while trying to get help	Smart, skills-based routing	Understands customer needs and sentiment quickly, matching them to the best agent to solve their problem. Predicts outcomes of specific customer-agent interactions, helping customers connect to the most effective agents.
Slow problem escalation	Automated, intelligent issue notification and escalation	Live call analytics allow agents and supervisors to be alerted to problematic issues, so they can escalate, intervene and accelerate resolution.
Long call resolution times	Real-time agent assist	Knowledge repositories are connected to deliver agents the information they need, reducing the time spent searching for answers and the amount of time a customer is waiting on hold. Agents get suggestions on next-best actions and answers.
Having to make repeated calls	Post-call analytics	Analyzes calls to identify patterns in customer feedback, agent performance, and overall quality. Improves future customer interactions by delivering training on most common questions and solving common problems.

Deliver a superior experience with machine learning

Build customer loyalty and satisfaction with every interaction

Agent pain points	Machine learning deployment	How machine learning helps
Tedious caller authentication	Fast, secure authentication	Improves fraud detection with synthetic voice and impersonation detection. Analyzes a caller's unique voice characteristics to verify identity. Eliminates the need to ask security questions. Authentication can take as little as 10 seconds and happen before the call is routed to agent.
Lack of real-time customer insights	Unified customer profiles with real-time customer insights	Brings together information from multiple apps and services like customer relationship management (CRM), order management, and contact records. Agents don't have to search across multiple systems or tab between browser windows.
Inability to manage follow up actions	Automated, coordinated follow-up scheduling for key customer tasks	Automatically assigns, tracks, and follows-up on agent tasks. Empowers agents, managers to prioritize, assign, track, and automate service tasks across disparate applications. Helps prevent customer requests from falling through the cracks, improving CSAT and reducing errors.
Unnecessary complexity	Fast, frictionless outbound interactions	Allows businesses to proactively reach millions of customers a day with personalized outbound calls and notifications via Voice, SMS, or email. Helps ensure that agents are only connected with a live customer, not a voicemail greeting or a busy signal.
Inability to get real-time help from supervisors during customer conversations	Real-time customer sentiment monitoring, call summarizations and issue notification	Detects customer sentiment, and automatically alerts supervisors when agents need assistance. Agents spend more time solving customer issues, customers spend less time waiting for help, managers and agents can quickly understand the context of a customer conversation.
Finding useful content and answers to questions across multiple knowledge bases	Real-time resolution recommendations	Natural language search makes it easier for agents to find the right information. Knowledge repositories are connected to deliver agents the information they need, reducing the time spent searching for answers and the amount of time a customer is waiting on hold.
Agent desktop complexity	Unified agent applications	Brings together all needed information and communication controls into a single desktop view.



Provide superior customer service at a lower cost with an easy-to-use omnichannel cloud contact center

From large, established businesses to startups, AWS provides flexible options to easily add machine learning intelligence to contact centers at any stage of the journey.



Amazon Connect

For businesses needing an easy-to-use, omnichannel cloud contact center

- Unified tools for routing, analytics, and management AI and ML enabled by default
- AI and ML enabled by default
- Set up or make changes in minutes

Amazon Connect: A machine learning-powered contact center

Amazon Connect helps deliver dynamic, natural and personalized experiences that enhance your customer interactions across voice and chat channels. Embedded artificial intelligence (AI) and machine learning (ML) makes it easy to automate interactions, understand customer sentiment, authenticate callers, and enable capabilities like interactive voice response (IVR) and chatbots. Low pay as you go pricing, can save you up to 80% over other contact centers. There's also no upfront commitments, licensing or maintenance fees.

How Amazon Connect helps businesses

Omnichannel for voice and chat experiences	Improved agent efficiency
Pay-as-you-go pricing	Lowered costs
Easily integrated solution	Simplified contact center operations

Amazon Connect includes one set of tools to help businesses deliver a personal, dynamic, and natural customer experience

Key features include:



Self-service configuration



Built-in real time and historical analytics

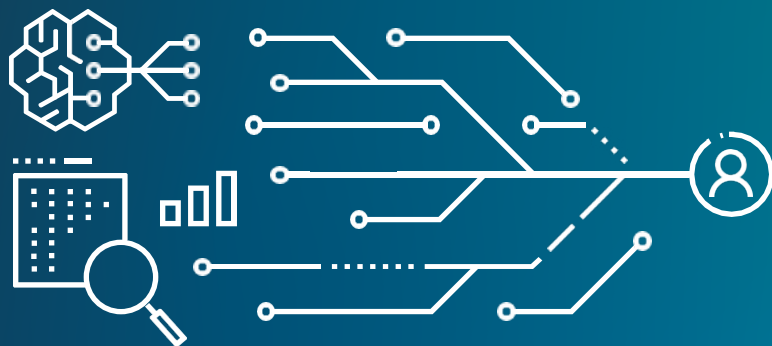


One application for workflows, agent management, routing, and experiences

How Amazon Connect works

Amazon Connect automates customer interactions and improves customer service with ML at the heart of every interaction.

Amazon Connect provides an interface for both agent and management support. Speech-to-text transcription and natural language understanding (NLU) facilitate automated conversations through intelligent and conversational chatbots and IVR and deliver information to ease handoff between agents. Real time, automated caller identity authentication helps validate a customer's identity by analyzing a caller's unique voice characteristics, eliminating the need for multiple personal questions. Enhanced routing gets customers to the right agent, right away. Automatic translation allows agents to better serve international customers. Natural language processing (NLP) and sentiment analysis let managers and leaders can find insights and relationships across product and service trends. Real-time agent assistance lets agents automatically provide information such as FAQs and articles to help answer customer questions. Altogether, Amazon Connect empowers customers to innovate their contact centers, to reduce costs, improve revenue, and offer innovative customer experiences.



Using AI and ML to make a difference

Utilizing high-powered language and interaction analysis creates opportunities for more personal—and more impactful—customer experiences.

Amazon Connect in action

Amazon Connect has tens of thousands of AWS customers supporting more than ten million contact center interactions a day.

A closer look at how Amazon Connect makes a difference

U.S.-based Priceline, a global provider of online travel, has a mission is to be the best travel dealmaker in the world to enable travelers to be there for the moments that matter. For Priceline, every trip is a big deal.

Priceline had operated its own contact center, outsourcing agents across five different call distributors. As the company expanded, it became clear that its system was no longer flexible enough to handle the growth.

Contact center operations were stretched across multiple systems and needed a team to distribute traffic. Changes could take weeks and required a road map for even small adjustments.

Priceline also realized that its legacy contact center system could not support scaling operations quickly to meet extraordinary surges in call volumes - particularly during major disruptive events, when thousands of travelers flooded the customer contact center to cancel or rebook itineraries.

Priceline moved decisively to modernize its contact center using Amazon Connect for routing, task management, real-time and historical analytics, and intuitive management. Today, the company can handle even the most daunting spikes in customer demand by rerouting calls and quickly implementing new features to reduce backlogs. Further, when disruption makes remote work necessary, Priceline's agents can work safely from home without sacrificing quality customer service.

Additional benefits included:



Efficient call back queue, for faster response, and simplified interactive voice response, to better understand customer needs and adjust and adapt to provide enhanced customer service.



Agent-to-agent chat to reduce customer hand-off for faster resolution and increased agent availability.

priceline

“Not once have we asked ourselves, ‘Can our contact center infrastructure handle this?’ We know that using Amazon Connect enables us to provide enhanced customer service.”

Jennifer Featherling Senior Director of Contact Center Technology,
Priceline Seeking a More Efficient Solution

An ML-powered contact center takes customer experience to new levels

Contact centers are vitally important in maintaining the human connections that businesses depend on. AI and ML are transforming contact centers into modern, omnichannel customer engagement centers that resolve problems, deliver relevant, personalized experiences, and build trust, interest, and loyalty. Adding intelligence to your contact center will increase your bottom line at any stage of your business.



Improving customer experiences



Increasing performance and cost efficiencies



Enhancing business insights

With Amazon Connect, contact centers of any structure can incorporate ML services to help achieve business benefits.

Getting started with Amazon Connect

Get started today and be up and running quickly! If you need help or want to further customize your contact center experience, take advantage of AWS professional services, partners, and training programs.

More information:

[AWS for contact centers ›](#)

[Amazon Connect ›](#)

[AWS Training ›](#)

[Support for contact center initiatives ›](#)

[Personalized solutions ›](#)

