



Improving service and reducing costs in contact centers

How adding intelligence optimizes your
business and customer experience





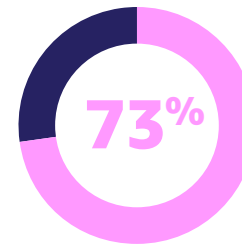
Improving customer experience boosts your bottom line

No matter the communication channel, a good customer service experience can have a significant impact on business metrics. From increasing efficiency to enhancing insights, contact centers are key to securing consumer loyalty and purchasing.

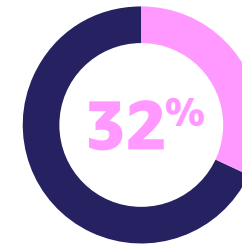
A contact center outfitted with the right technology across diverse channels, including telephone, messaging apps, and social media, can support resolving customer issues quickly, tracking engagements, and capturing data. But, while many companies are interested in applying advanced technology to improve customer interactions, they struggle with how to drive efficiencies and improve automation in the service experience. A key element in transformation? Adding machine learning.

Companies that excel at customer experience grow revenues 4%–8% above their market²

Consider:



of individuals surveyed globally point to customer experience as an important factor in their purchasing decisions, behind price and product quality.¹



of customers would stop doing business with a brand they loved after one bad experience.¹

The benefits of machine learning in solving contact center challenges

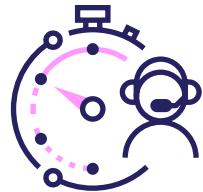
The application of artificial intelligence (AI) and machine learning (ML) can turn a contact center into a profit center, which improves the customer experience while reducing expenses.

AI and ML Benefits



Increase customer satisfaction

- Reduce call wait times
- Quickly route questions to the right agent
- Decrease time to resolution



Increase agent productivity

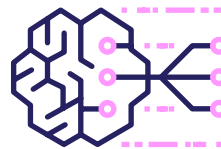
- Reduce call volume
- Offload repetitive questions to chatbots
- Enable real-time assistance



Increase business opportunity

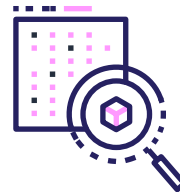
- Reduce costs via self-service technologies
- Increase amounts of high-quality data on customer satisfaction, potential product issues, and agent training
- Deliver faster, more effective service, leading to higher NPS/CSAT scores

AI or ML: What's the difference?



Artificial intelligence

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


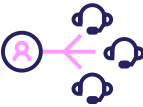





Machine learning

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

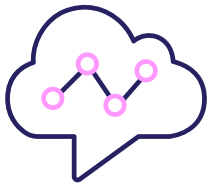
The role of machine learning in contact centers

Implementing machine learning in contact centers offers improved agent efficiencies and better customer experiences.

Resolvable Pain Points	Machine learning deployment	How ML helps
The need to repeat information or use specific phrases	 Conversational IVRs/bots/virtual agents	Enables bots and virtual agents to recognize customer speech, understand intent, and create an experience where questions can be resolved without a live agent. If questions do need to transfer to a live agent, all information is passed on, eliminating need for customers to repeat themselves
Multiple transfers between agents while trying to get help	 Smart routing	Understands customer needs and sentiment quickly while predicting outcomes of specific customer-agent interactions, helping customers connect to the most effective agents
Unhappy call experiences	 Live-call analytics	Becomes possible for agents and supervisors to be alerted immediately to issues in order to help agents meet customer needs quickly
Long call resolution times	 Agent assist	Suggests next-best actions via pre-determined rules, best past responses, or hands-free live searches to help agents identify applicable resources quickly
Repeated call frustrations	 Post-call analytics	Analyzes calls to identify patterns in customer feedback, agent performance, and overall quality management

AWS offers intelligent contact center services, security, analytics, and storage

From large-scale established companies to start-ups, Amazon Web Services (AWS) provides flexible options to easily add machine learning intelligence to contact centers at any stage of the journey.



Amazon Connect

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

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



AWS Contact Center Intelligence (CCI)

For companies looking to add machine learning to established contact centers:

- Individual services
- Combinable solutions
- Easy integration into existing enterprise systems



Amazon Connect: a machine learning-powered contact center

An easy-to-use omnichannel contact center, Amazon Connect helps companies provide superior customer service at a lower cost. It easily integrates into other systems, such as customer relationship management (CRM), workforce optimization (WFO), or workforce management (WFM) systems, creating a seamless operations experience.

How Amazon Connect helps businesses

Unified communication channels or contact center channels for voice and chat

Improved agent efficiency

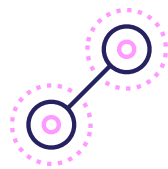
Pay-as-you-go pricing

Lowered costs

Easily integrated solution

Simplified contact center operations

The seamless Amazon Connect contact center includes one set of tools to help businesses deliver a personal, dynamic, and natural customer experience. Key features include:



Skills-based routing



Real-time &
historical analytics



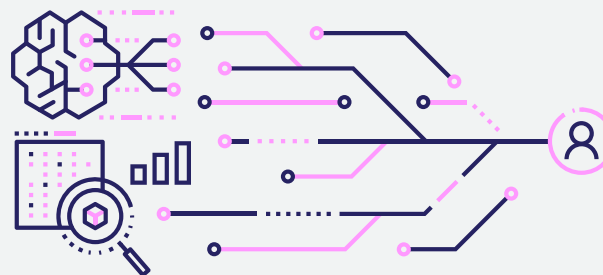
Intuitive
management tools

How Amazon Connect works

Amazon Connect automates customer interactions and improves customer service with default-enabled AI and ML.

Amazon Connect provides an interface for both agent and management support. Using the same technology that powers Amazon Alexa, Amazon Connect services use speech-to-text transcription and natural language understanding (NLU) to facilitate conversations without the need for agents, and deliver information to ease handoff between agents.

Additionally, automatic translation means that agents can better serve international customers. With natural language processing (NLP) and sentiment analysis, managers and leaders can find insights and relationships across product and service trends. Altogether, Amazon Connect prepares organizations to train agents more effectively and deliver the right customer care.



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

Thousands of companies comprised of tens of thousands of agents use Amazon Connect to serve millions of customers daily.

A closer look at how Amazon Connect makes a difference

Intuit serves more than 16.5 million people per year with technical support, tax document reviews, and purchasing assistance.

Before implementing Amazon Connect, Intuit customers experienced long hold times and frustration when having to repeat information after being transferred to new agents on a call.

Amazon Connect provided Intuit with a seamless customer experience and quick resolutions by unifying customer data among multiple business units. Additional benefits included:

intuit.

"Using Amazon Connect, we realized we could enable a unified contact center spanning multiple business units and integrating voice, chat, messaging, and web . . . AWS helps us innovate more quickly and easily to improve our customers' experience, while also lowering our operational costs."

Harish Viswanathan

Director, Virtual Expert Platform, Intuit



Callback functionality,
reducing wait times



Improved voice clarity,
making customers happier

AWS Contact Center Intelligence (CCI)

AWS Contact Center Intelligence (CCI) solutions can quickly and easily add intelligence to an existing contact center solution to improve service and reduce cost. The wide variety of offerings is easily integrated and supports quality management initiatives, including timely, actionable insights.

How AWS CCI helps businesses

Easily integrated solution

Quick implementation

Variety of offerings

Increased customer satisfaction

Agent assistance and quality management

Lowered operational costs

Timely, actionable insights

Efficient agent interactions

AWS CCI solutions enable customers with almost any contact center solution to leverage off-the-shelf functionality powered by machine learning (ML), including conversational interactive voice response (IVR), automatic speech recognition (ASR), language comprehension, search, and translation. AWS CCI solutions cover three key areas of the contact center workflow:



Self-service



Live-call analytics
& agent assist



Post-call analytics

How AWS CCI self-service solution works

The AWS CCI self-service solution provides capabilities so customers can find answers or complete transactions without the assistance of a live agent.

This solution relies on multi-channel voice and chat bots along with interactive voice response (IVR) to provide basic task resolution and call deflection. AI and ML services utilize deep learning functionalities of automatic speech recognition (ASR) to convert speech to text and natural language understanding (NLU) to recognize intent. Combined with ML-powered intelligent search, the AWS CCI self-service solution provides accurate answers from structured and unstructured data.

Using AI and ML to make a difference

Fulfilling transactional queries allows contact center employees to focus on higher-value work.

TechStyle Fashion Group

“More and more consumers are relying on automated methods to interact with brands, especially in today’s retail environment where online shopping is taking a front seat.

The Genesys Cloud and Amazon Web Services (AWS) CCI integration will make it easier to leverage conversational AI so we can provide more effective self-service experiences for our customers.”

Arade Cosseboom

Senior Director of Global Member Services
Technology Analytics and Product,
TechStyle Fashion Group

How AWS CCI live-call analytics and agent assist solutions work

The AWS CCI live-call analytics and agent assist solutions help agents and supervisors better understand and respond to customer needs quickly, creating efficiencies while helping deliver even better customer experiences. AI-powered speech analytics support finding relevant and actionable information from the organization knowledge base.

With natural language processing (NLP) and real-time speech transcription, AI analyzes the interaction, detects caller sentiment, and identifies key words and phrases—in the caller's language or via automated translation into an agent's preferred language. Real-time insights assist agents with suggested answers, post-call notes, and automatic supervisor alerts for proactive support.

Using AI and ML to make a difference

Providing real-time answers, insights, and actions increases agent productivity and satisfaction.



How AWS CCI post-call analytics solution works

The AWS CCI post-call analytics solution uses previously recorded calls to produce customer insights, helping agents and supervisors identify patterns and quality concerns to improve the overall customer experience.

With post-call speech analytics dashboards, AWS can help unearth macro insights into customer and product feedback.

Using AI and ML to convert audio files into text transcription—and translation, if needed—allows managers, quality assurance personnel, and other leadership groups to review agent and operational performance statistics. Automatic analysis of contact center conversations means that companies and agents can ensure compliance and resolve customer issues faster.

Using AI and ML to make a difference

Gathering deep insights on product and service feedback establishes more efficient call reviews and develops better agent performance scorecards.



Amgen uses innovative science like human genetics to discover, develop, manufacture, and deliver innovative human therapeutics. Monitoring myriad call records from patients and healthcare providers was complicated, as identifying adverse drug events and potential side effects relied on technical language.

Because AWS CCI produces accurate transcriptions from call recordings, it dramatically changed Amgen's approach to uncovering insights.



Enabled the analysis of calls at scale



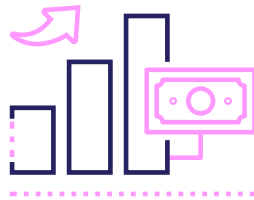
Provided medical speech-to-text with accurate terminology and notation

A modern contact center is an intelligent contact center

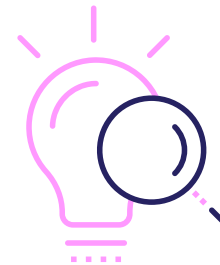
AI and ML are helping to transform the modern contact center from a cost center to a profit center. No matter the stage of your business, market landscape, or business goals, adding intelligence to your contact center will increase your bottom line.



Improving customer experiences



Increasing performance and cost-efficiencies



Enhancing business insights

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



Getting started with AWS machine learning

Accelerate your machine learning initiatives with professional services, partners, and training programs.

[AWS for contact centers ›](#)

[Amazon Connect ›](#)

[Amazon CCI ›](#)

[Training ›](#)

[Support for contact center initiatives ›](#)

[Personalized solutions ›](#)