Artificial intelligence and the contact center
The rise of consumer expectations, digital interactions, and technological advances are driving companies to rethink the way they interact with their customers. Intense competition and customer interactions at every stage of the journey are challenging companies to create seamless and differentiated experiences for their customers.

Studies by industry thought leaders like Gartner, Forrester, and McKinsey all indicate that how a company delivers goods and services to its customers is as important or more important than what it delivers. According to IDC, over 70% of buyers point to customer experience as an important factor in purchasing decisions.

Artificial intelligence (AI) is one of the most exciting technological innovations of the modern age. AI and its derivative technologies, including machine learning (ML) and natural language processing (NLP) are being used to solve a number of problems, by offering new ways to automate tasks, create new efficiencies, and augment the performance of employees to empower them to achieve more and provide better customer experiences.

Contact centers are at the frontline of these experiences.

By 2025, AI-powered enterprises will be able to achieve Net Promoter Scores that are 1.5 times higher than those of their competitors.

Source: IDC Technology Spotlight on AI
The role of artificial intelligence in the contact center

Artificial intelligence is playing a key role in advancing contact center productivity and efficiency, and most importantly it’s benefiting both agent and customer experiences.

Artificial intelligence, at its core, is based on the concept of fast predictions. Contact centers have been using AI in some limited form for decades. Even with basic automatic call distribution (ACD) technology it was possible to identify and route calls to the right agent at the right time using basic predictive algorithms to determine the best agent. The confluence of large data sets, faster processors, and cloud technologies have now made AI more powerful, relevant and practical.

Virtual agents such as chat bots, conversational IVRs, and intelligent assistants help to minimize agent burnout, while improving the quality of time spent with customers who need help from a human agent.

AI is being used to empower agents by putting context at their disposal in real-time, so they can quickly and accurately respond to customer inquiries on the first contact.

What frustrates customers?

- Poorly designed online experiences and rigid menu choices
- Long wait times and lack of self-service
- Agents not able to resolve problem on the first call
Pain points of the contact center

Low CSAT, NPS, FSR

Poor customer experiences are hurting customer satisfaction (CSAT), net promoter score (NPS), and the bottom line.

Customer expectations and competitive pressures continue to be the driving force behind improving employee and process efficiencies.

Companies that differentiate CX across every touchpoint in digital and non-digital channels are those that will succeed in delighting their customers with fast, easy, and personalized service.

High agent churn

Agent turnover is at its all-time high with the average time to onboard a new agent taking 2 to 4 weeks and costing on average between $10K and $20K.

Agent churn creates disruption to productivity and workflows, ultimately leading to unhappy customer experiences. Agent burnout due to high call volumes and lack of access to relevant content hurts agent morale and their ability to meet first-contact resolution goals.

Process inefficiencies

Contact centers are challenged with cumbersome processes that create inefficiencies. 71% of contact center decision-makers say having too many manual processes and lack of automation is a significant problem, hurting productivity, customer satisfaction, and business outcomes.

In addition, poor customer/agent matching hurts first impressions leading to high customer churn and low customer loyalty.
The life of a contact center agent

Put yourself in the shoes of a contact center agent who works with a number of different and often disconnected systems, sorts through loads of information and content, and tries to find the right answer or expert to help solve a customer inquiry. All this while possibly dealing with a frustrated customer. If you’re wondering why agent turnover rates are so high, this is why.

Using AI and ML technologies to automate low-level tasks and give customers an easy way to self-serve is one of the most effective ways to make agents’ work-life easier and solve information and call overload.

According to a survey conducted by the Aberdeen Group, agents spend 17% of their time searching for relevant knowledge to do their job. AI ensures agents have information at their fingertips, so that they can care for each customer at a highly tailored, individualized level.

What frustrates contact center agents?

Cumbersome, repetitive tasks to close out tickets.

Too many steps in processes.

Slow processes due to outdated technology.

Source: Cisco Global Contact Center Survey
Why are businesses implementing AI in the contact center?

01 Cross-sell/Up-sell opportunities

02 Agent satisfaction and efficiency

03 Analytics tools to identify trends

60% of businesses plan to implement / expand AI in their contact centers within the next three years

Source: Global Data Voice of the Customer – AI in the Customer Journey

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# How successful companies use artificial intelligence

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>96%</td>
<td>Will have their agents only handle highly specialized interactions by 2025</td>
</tr>
<tr>
<td>104%</td>
<td>Increase in CSAT scores when using AI and omni-channel</td>
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<tr>
<td>53%</td>
<td>Had measurable results using AI to improve customer experience</td>
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## AI benefits

- **Reduces agent churn:** Minimizes cumbersome, repetitive tasks that create agent burnout.
- **Equips agents with knowledge:** Enables agents to provide faster and more accurate customer service.
- **Improves customer service:** Offloads high call volumes and improves quality of time spent on complex inquiries.
- **Speeds productivity:** Reduces agent onboarding time and costs so they can be productive on day one.
- **Improves FCR:** Increases agents’ ability to meet first-contact resolution goals.

Source: Nemertes Intelligent Customer Engagement – Supercharging digital customer experience
One of the most misunderstood beliefs about AI is that it will eventually replace human employees. AI will certainly change workloads, staffing and processes that may lead to redefining how your contact center is staffed, but a primary advantage of AI is that it augments agents to make them more scalable and efficient.

AI and skilled people will need to work together. Take the example of a chat bot. When the bot detects that the interaction needs to be escalated to a human agent, it brings along with it the history of the conversation to enable a seamless transition from self-service chat to assisted chat. The agent can then very quickly and effortlessly take over the interaction with everything they need displayed right in front of them.

In this regard, AI is an enabler for better live agent assistance, not a replacement of it.
Technology innovation is critical for agent experience

92% Agree that user experiences are important to their agents

76% Agree that agents working through technology issues or process issues is their greatest challenge

93% Feel technology is highly important in creating better agent experiences

AI has the potential to transform agent experiences. Our global study revealed that ¾ of contact center leaders agree agent experience has a significant impact on customer experience.

Minimizing cumbersome, repetitive tasks, and equipping agents with AI-powered context and knowledge in real-time, empowers them to deliver timely and accurate responses customers expect.

Agents are happier when they feel successful. Improving agent morale and job satisfaction leads to reduced turnover, which is costly to the business.

Source: Cisco Global Contact Center Survey
Empowering your remote employees with AI

Extending your contact center operations to remote locations such as agent home offices is an efficient way to increase capacity of your contact center and improve agent productivity and job satisfaction.

Implementing chat and voice bots to handle incoming customer inquiries not only gives your customers intuitive 24/7 access to your business, it also ensures a seamless transition to remote agents when live agent assistance is needed.

Artificial intelligence can turn your remote agents into “specialists,” providing them with real-time guidance, suggestions, and instructions that are automatically displayed at their desktop based on the context of the agent-customer conversation. Agent assistance also provides easier ramp-up for newer agents, leading to higher productivity and lower costs.
Using data and AI to improve customer loyalty

**Artificial intelligence** thrives on data and is turning data into a new source of competitive advantage. When combined with AI, data analytics provides a powerful tool to enhance how contact centers engage with their customers proactively.

The secret to applying AI effectively starts with your data. AI can provide answers into what your data is telling you, giving you better understanding of the insights hidden in your data so that you can optimize contact center operations and resources for peak efficiency.

The combination of the two provides insights into a customer’s journey, uncovering the “truth” of how customers are experiencing a brand. With this knowledge, businesses can change those experiences to make them better and more profitable.
Artificial Intelligence enables more accurate decisions and routing so that many customer interactions can be handled without a human agent. AI has the ability to classify information and make predictions faster and at higher volumes than humans can accomplish on their own.

As an example, in an omni-channel contact center, customers can be routed much more quickly and efficiently to the right resource that can add the most value to the experience based on the intent or reason for the call, and the channel the customer is using (e.g., email, phone, chat).

AI can determine which inquiries can be handled by a virtual agent and which ones (the exceptions) will be longer and more complex in nature, and likely need live agent assistance. This requires contact centers to redefine how they do agent staffing and how they measure call volume and call success. The same amount of staff would be handling fewer, but longer calls, rather than many shorter, less complex ones.

Experience a reduction in call volumes to agents when chat bots are deployed

Source: Cisco Global Contact Center Survey
AI enables automation

Business process automation is a key benefit of AI in the contact center because it increases agent efficiencies and workflows.

However, the human world is complex and AI is still reliant on the human element. Think of it in terms of agent augmentation as much as automation. Technology-enabled expertise and human expertise are both needed.

Many people still want to engage with a human, so as contact centers take advantage of automation, it’s essential that customers can still reach a person when one is needed. These exceptions are often make-or-break moments in a customer relationship.

An example of this is an AI-powered intelligent agent that can listen to customers conversations in real-time, and proactively present intelligent suggestions and other key forms of enterprise knowledge to the agent desktop, while the human agent is interacting with a customer. This empowers agents with the needed context and information they need to deliver faster and more personalized care.

Companies experience a 37% increase in CSAT scores when using AI.

Source: Nemertes
Business outcomes of AI

Improve brand reputation and net promoter scores
AI helps companies provide convenient, fast and personalized customer experiences that result in improved first impressions, customer loyalty, and more referrals.

Improve revenue per customer
AI drives top-line revenue by increasing the number and quality of customer engagements. Agents spend more time with customers on higher-level tasks, allowing them to build deeper relationships and increase up-sell and cross-sell opportunities.

Improve workflows, increase accuracy, and reduce costs
Automating low-level tasks cuts costs, directly impacting the business bottom line. AI knows customer intent and can therefore precisely route customers to the best resource.

Increase customer satisfaction and retention
Giving customers a way to easily self-serve reduces the load on human agents and increases customer satisfaction.

Improve agent productivity and satisfaction
AI automates tasks that simplify the agent experience, improve efficiency, and reduce agent churn.

Improve first-contact resolution
Empowering customers to easily self-serve for simple requests that don’t require human assistance ensures their needs are met the first time and eliminates multiple calls.
Cisco Contact Center AI solutions are powered by best-in-breed AI technologies such as Cisco’s own AI, and Google Cloud Contact Center AI.

**Virtual agent-voice**
Provides your customers with a natural conversational self-service experience over the phone using natural language understanding (NLU). Automates tasks, gives customers 24/7 access to your business while relieving agents of simple and repetitive tasks.

**Virtual agent-chat**
Intuitive online self-service experience with chat bot for simple, less complex inquiries. Reduces the number of inquiries to agents, leading to improved agent productivity, and provides convenient, fast service for customers.

**Agent answers**
Empowers agents with context-driven suggestions and guidance in real-time as they are talking and/or chatting with a customer, minimizing agent research time and improving first-contact resolution.

**Agent call transcription**
Provides agents with call transcript and summary, minimizing post-call wrap-up time, improving agent efficiency and accuracy of transaction and follow-up.

**AI APIs**
Our open platform enables customers to differentiate their business by quickly developing AI solutions that meet their unique business needs.
Artificial Intelligence is advancing quickly and continues to show up in new places, creating exciting new possibilities for contact centers, and making a major impact in employee and customer experiences.

Three actions to consider

01 Focus on new forms of self-service with the understanding that human-assisted exceptions will always be needed.

02 Enhance and augment agent experiences with an eye on retention.

03 Cloud is the vehicle for AI innovation. Make cloud transformation a priority to take your contact center into the future.
Cisco is a global leader in cloud contact centers, delivering the most complete contact center portfolio powered by best-in-breed artificial intelligence technologies, combined with world-class cloud calling, meetings, team collaboration, and customer experience management solutions, and the most advanced audio/video devices and headsets.

Cisco is the market-share leader for contact centers. We’re number one in North America and number two worldwide. We have more than 32,000 loyal customers and more than 3 million agents installed globally.

Cisco Contact Center AI solutions are delivered by the most innovative team of AI experts with over 100 years combined experience in AI research and development.

Our cloud solutions are based on Webex, one of the world’s best known, scalable, and reliable cloud platforms. Cisco releases a significant cloud update every month and a major on-prem update semi-annually, advancing our commitment to providing all customers advanced technology and business success.

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