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WHITEPAPER

AI in action: Unveiling new strategies for the contact center

Introduction

The role of contact centers has never been more pivotal in shaping customer experiences than it is today. As businesses navigate an increasingly competitive landscape, the need to deliver exceptional service while optimizing operational efficiency has become paramount. This whitepaper delves into the critical value that artificial intelligence (AI) and automation bring to contact centers, transcending traditional customer service paradigms and resulting in a new era of customer engagement.

This whitepaper aims to provide a comprehensive exploration of the critical role played by AI and automation in modern contact centers. It will examine the myriad of ways these technologies enhance customer interactions, streamline processes, drive business growth, and reduce costs.

The customer experience landscape

The contact center landscape is in a state of continuous evolution, driven by the ever-changing dynamics of customer expectations, technological advancements, and global market trends. The industry faces multifaceted challenges and complexities that are driving them into a new era of technological development and ultimate customer experience.

One of the biggest challenges in the contact center industry is that modern consumers demand more than basic support. They expect seamless, personalized, and omnichannel experiences, prompting contact centers to deliver consistent service across a growing array of communication channels — from traditional phone calls to social media, chatbots, and virtual assistants.

Customers want interactions that feel tailored to their needs and preferences, and more than ever before, contact centers need to turn to advanced technology to deliver a personalized experience. Moreover, these interactions must be consistent across channels, decrease wait times, and speed up first-call resolution.

A second challenge in today's contact center landscape is the vast amount of disparate data generated by day-to-day operations across multiple platforms. Extracting actionable insights from this data to enhance customer experiences, streamline agent activity, and increase operational efficiency is a significant challenge.

Cost management is an additional challenge. Running a contact center can be expensive, with costs associated with technology,

staffing, and infrastructure. Balancing cost containment with maintaining high-quality service is an ongoing challenge.

Agent turnover can be costly as well, with hiring, training, salaries, benefits, and retention efforts continuously impacting budget. Further, keeping agents well-trained and up to date with the latest products, services, and technologies requires ongoing investments in training programs that can be expensive and quickly outdated.

Additionally, contact centers rely on various technologies and infrastructure, including phone systems, CRM software, workforce management tools, and contact center platforms. Integrating, upgrading, and maintaining these systems can be expensive, including the costs of software licenses and hardware.

Understanding AI and automation in customer experience

AI refers to the simulation of human intelligence in computer systems. In a call center, AI involves the use of advanced algorithms and machine learning (ML) techniques to enable computers and software to perform tasks that typically require human intelligence.

This includes activities such as understanding and processing natural language, recognizing speech patterns, making data-driven decisions, and learning from data over time to make improvements. AI in contact centers can be applied to tasks like chatbot interactions, sentiment analysis, predictive analytics, and agent assistance, all aimed at improving customer service, agent efficiency, and overall operations.

Automation in the contact center refers to the use of technology to streamline and perform routine and repetitive tasks without human intervention. This can include a wide range of activities, such as automated call routing, self-service options like interactive voice response (IVR) systems, automated data entry, and the automatic assignment of tickets or cases to agents based on predefined rules and skillsets.

Automation helps reduce manual work, improve efficiency, and streamline processes. It can reduce the need for large numbers of agents, as well as free up human agents to focus on more complex and value-added tasks such as upselling, enhancing the overall customer experience.

In practice, AI and automation are often used together in contact centers to create intelligent communications automation systems.

These systems leverage AI capabilities to make automation smarter and more adaptable. For example, AI-powered chatbots can handle customer inquiries by understanding and responding to natural language and sentiment, and they can seamlessly fulfill customer needs without involving live agents.

This combination of AI and automation is transforming contact center operations by enabling them to provide more efficient and personalized service to customers while optimizing their internal processes. This personalization must be achieved with the use of several features:

- **Chatbots:**

  Application: Chatbots are AI-driven virtual agents that can engage with customers through text or speech, answering frequently asked questions, providing information, and resolving common issues.

  Benefits: They offer 24/7 availability, handle high volumes of inquiries simultaneously, and provide quick responses, reducing customer wait times and the need for live agents.

- **Natural language processing (NLP):**

  Application: NLP enables machines to understand, interpret, and generate human language. In contact centers, it's used for speech recognition, text analysis, sentiment analysis, and language translation.

  Benefits: NLP helps with automated call routing, transcribing and analyzing customer interactions for insights, and understanding customer sentiment to gauge satisfaction and drive desired actions and results.

- **Speech analytics:**

  Application: Speech analytics uses AI to transcribe and analyze recorded calls. It can identify keywords, phrases, and patterns to assess agent performance, customer needs, and compliance.

  Benefits: It provides valuable insights into customer preferences and pain points, helping in agent training, quality monitoring, and improving service quality and security requirements.

- **Predictive analytics:**

  Application: Predictive analytics uses historical data and AI algorithms to forecast future events, trends, or results. In contact centers, it can predict call volumes, customer behaviors, and agent performance.

Benefits: It enables contact centers to staff appropriately, optimize resource allocation, and anticipate customer needs, leading to better service and cost savings.

- **Virtual assistants:**

  Application: Virtual assistants, also known as AI-powered personal assistants, can help agents during customer interactions by providing real-time information and suggestions.

  Benefits: They empower agents with quick access to relevant contextual data, enabling them to resolve inquiries more efficiently and accurately.

- **Sentiment analysis:**

  Application: Sentiment analysis uses AI to determine the emotional tone of spoken language. In contact centers, it assesses customer sentiment during interactions.

  Benefits: It helps bots gauge customer satisfaction in real time, enabling them to adapt their responses and actions to create a more positive customer experience.

- **Robotic process automation (RPA):**

  Application: RPA involves automating rule-based, repetitive tasks within call center processes, such as data entry, form filling, and report generation.

  Benefits: RPA reduces the need for agent interaction, freeing up agents to focus on higher-value tasks, ultimately improving operational efficiency.

- **Machine learning (ML):**

  Application: ML algorithms can be used for various purposes, including customer segmentation, personalized recommendations, and predicting customer needs.

  Benefits: ML enhances customer engagement by tailoring interactions to individual preferences and increasing cross-selling and upselling opportunities.

- **Customer relationship management system (CRM):**

  Application: These systems use AI to organize and manage vast amounts of data and knowledge within an organization, making it easily accessible to agents during customer interactions.

  Benefits: Customer relationship management systems ensure that agents have access to accurate and up-to-date information, enabling them to provide consistent and informed responses to customers.

The value of AI and automation in customer experience

Cloud-based Communications Automation Platforms (CAPs) stand out as the exclusive market option for contact centers seeking to harness the full capabilities of AI. The technology leverages AI-powered automation and plays a pivotal role in modernizing contact centers by introducing flexibility, scalability, cost-efficiency, and a host of advanced features.

AI-powered CAPs can scale seamlessly to accommodate fluctuations in call volumes and staffing. This elasticity ensures that contact centers can handle both regular and peak demand efficiently without the need for significant upfront investments in infrastructure and agents. With cloud-based solutions, contact centers can avoid the capital expenses associated with on-premises hardware and software, including maintenance and upgrades. Instead, they can experience a faster time-to-market and pay only for what they use, making it a cost-effective and faster option for contact centers of all sizes.

However, one of the key aspects of AI and automation is that they can significantly reduce labor costs. This is achieved by automating agent tasks and optimizing bot and workforce efficiency, ultimately contributing to cost savings.

By handling routine data entry tasks, such as updating customer information or inputting order details, which would otherwise require manual effort, AI-powered solutions can reduce the need for agents that cover these manual functions. Fewer agents are also needed when implementing an automation solution that allows AI to manage appointment scheduling and ticket creation.

Since 73%[1] of consumers prefer self-service options over contacting an agent, AI-driven IVR systems enable customers to access information and perform basic tasks independently, reducing the volume of calls that require agent assistance. Chatbots can handle a wide range of customer inquiries, from checking account balances to providing product information, all without agent intervention.

Another technological aspect that contributes to reduced labor costs is call routing. AI algorithms can route calls to the correct next level of IVR for self-service, allowing the callers to resolve their issue without a human agent. If necessary, AI can also route the caller to the most appropriate agent based on factors like skill level, availability, and historical performance. This ensures that complex calls reach experienced agents, improving first-call resolution rates.

1 Source: HubSpot, 14 Stats That Make the Case for Self-Service in 2022, Sept. 27, 2022.

Further, AI can predict call volume patterns, enabling contact centers to adjust staffing levels more accurately or provide more applicable self-service options, hence preventing overstaffing during slow periods, understaffing during peak times, or reducing staffing altogether. AI-powered automation can help optimize schedules for agents based on predicted call volumes, ensuring that staffing aligns with demand.

Automation can also be applied to back-office tasks like data validation, report generation, and document processing, reducing the manual workload on agents. By automating repetitive and monotonous tasks, AI and automation can alleviate the burden on agents, reducing the risk of burnout and turnover. This helps in retaining experienced staff and avoiding recruitment and training costs associated with high turnover rates.

AI and automation enhance customer experiences by providing quicker, more accurate, and consistent responses, leading to higher customer satisfaction and reduced call volumes due to repeat inquiries.

Reduced training time

AI can assist in agent training by providing real-time guidance and information during customer interactions, enabling new agents to become productive more quickly and reducing the time and resources required for training.

By implementing AI and automation strategically, contact centers can optimize their operations, decrease human resources, and ultimately reduce labor costs while maintaining or even improving service quality. These technologies help strike a balance between cost reduction and customer satisfaction, contributing to the overall success of call center operations.

IntelePeer's Communications Automation Platform

With the cloud-based, AI-powered IntelePeer Communications Automation Platform (CAP), you can automate your contact center and usher in a new era of efficiency and customer satisfaction.

The result is:

- **Significant labor cost reduction** as businesses are able to use AI and automation to rethink their need for costly contact center agents.

- **In-quarter ROI** as businesses are able to experience immediate payback.

- **Improved customer satisfaction** as businesses leverage AI and automation to provide a better customer experience without the need for agent intervention.

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