

Harmonizing Al and Human Intelligence for Modern Customer Service

(with Step-by-Step Frameworks)



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Introduction

Customer service has witnessed a sea of change over the years, transitioning from personal encounters and phone calls to automated responses and today's sophisticated Artificial Intelligence (AI) arena. AI is no longer a part of the future; it's reshaping the present, altering the way businesses around the globe engage with their customers.

By 2027, the Al market is expected to reach

\$407 billion

indicating Al's vast potential for growth and relevance across industries.

In this guide, instead of reiterating the oft-told tales of AI, we delve directly into the latest developments and the innovative AI-powered solutions at your disposal. We dive into the transition from rule-based automations to AI-driven efficiencies that mark the current state of AI in customer service. Rule-based systems, with their binary logic, paved the way for the more nuanced and sophisticated AI solutions we rely on today. These AI solutions, like Generative AI, Intent AI, Sentiment AI, and Language AI, offer a deeper understanding of customer needs and emotions.

We will explore the disruption brought about by generative AI models like GPT, which have changed the game by enabling more meaningful and context-rich interactions between businesses and their customers. Their ability to generate human-like text has fueled advancements in AI-powered chatbots, making them more conversational and helpful than ever before.

We also address the challenges inherent in integrating AI into customer service operations. Contrary to the misconception of AI as an end-all solution, it has limitations. We aim to provide a realistic and practical guide to navigating these obstacles.

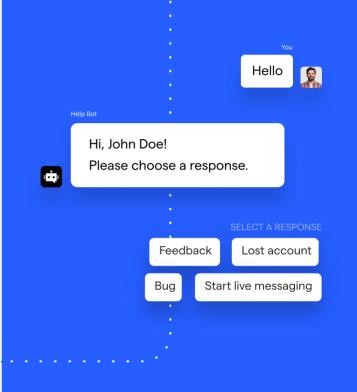
Further, we will demonstrate and compare various approaches to integrating AI into customer support. From selecting the right AI technologies that align with your business goals to implementing them in your customer service operations, we will outline the steps involved and compare different strategies.

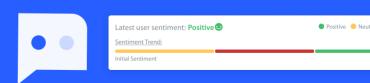
This guide is intended for everyone invested in understanding this exciting pivot in technological advancement. Whether you're a company leader aiming to infuse Al into your customer service strategies or an individual intrigued by this transformation, our guide aims to provide a comprehensive perspective. So let's delve into the promising landscape of Al-driven customer service.



The Evolution of Al in Customer Service

Al has been swiftly integrated into many facets of customer service in the last few years. As we move further into the digital age, Al plays an increasingly important role in shaping the future of customer service interactions.





From Rule-Based Automations to Al-Driven Efficiencies

In 2014, Helpshift first started incorporating Al and automation into customer service. We started with rule-based automations, queues, and auto assignments. These innovations allowed workflow processes to be streamlined, resulting in increased efficiency and productivity. However, these were still basic applications of Al.

The next level was to incorporate issue clustering, intent AI, and rule-based workflows with (Custom Bots). These technologies took automation to another level by using artificial intelligence to detect and triage the intent behind the customer's query. This enabled the system to automatically route the query to the most appropriate channel or customer service agent, saving invaluable time and enhancing the customer experience.

Adopting AI, automations, and rule-based chatbots led to an impressive increase in efficiency. Using chatbots enabled teams to identify common questions and provide proactive solutions. Implementations of these technologies reported efficiency increases of up to 75%, freeing the team to focus on more complex or unique issues.

Al can reduce customer service costs by

up to 30%

Disruption with GPT

While the advancement in intent-based AI was impressive, the emergence of larger language models (LLMs) like OpenAI's ChatGPT significantly disrupted the sector. This technology has proven proficient in comprehending human language and differing communication styles.

Companies soon recognized the potential of LLMs and started utilizing them in customer service applications to progress from basic Q&A interactions to more complex conversation handling.

According to Gartner, by 2025, a staggering 80% of customer service organizations are expected to utilize generative AI technology to some extent (Source). This adoption aims to significantly enhance agent productivity and overall customer experience (CX). At its core, generative AI, which finds itself at the Peak of Inflated Expectations, is anticipated to bolster AI-supported chatbots and automate tasks traditionally performed by humans.

Al is expected to see an annual growth rate of

37.3% from 2023 to 2030

highlighting the pace at which AI is evolving and becoming integral to customer service.

The Current State of Al

Currently, the focus is on seamless customer service experiences and the role of Al and automation in achieving that. Contemporary companies are using Al to fill context gaps and create a continuous, frictionless experience, moving from one support channel to another.

Many companies are now striving to provide omnichannel customer service.

Al-powered bots have the ability to operate across various channels like Live chat,
WhatsApp, Facebook, Instagram, SMS, etc. This allows them to provide support to
customers on the channel of their preference. While companies still consider providing
omnichannel support as customers may reach out on social channels, customers
strongly prefer in-brand experiences. This is because it offers Al a much richer context
to drive the conversation, along with conversational interfaces that are optimized for
the best customer experience.







75%

Over 75% of consumers are concerned about misinformation from Al.





Over the past year, Al has advanced rapidly, and consumers have taken notice. However, there are indications that businesses are not moving fast enough, with two-thirds of customers believing that companies are underutilizing Al. Despite this, support leaders remain optimistic about the possibilities Al and automation will bring to customer service. The task now lies in bridging the Al readiness gap, in which support leaders are more enthusiastic about Al than customer service practitioners.

The integration of AI in customer service, while transformative, is not devoid of challenges. Two significant issues currently manifesting in AI technology are hallucination and the generation of inaccurate information. These problems underscore the technology's existing challenges in accurately parsing and processing complex human inquiries.

Al hallucination occurs when Al systems produce or claim incorrect information, leading to confusion and mistrust among users. This issue stems from outdated data, misinterpretations, or inherent flaws in Al, negatively affecting customer satisfaction and trust in brands, especially when critical decisions are based on such misinformation.



Helpshift uses Retrieval-augmented generation (RAG) technique powered by its Quick Search Bot to enhance the accuracy and reliability of its Alpowered Answers.

RAG is a technique that lets you pass additional information along with the instructions in the LLM prompt.

Today's challenges underscore the need to balance Al innovation and careful implementation. Comprehensive testing and robust safeguards are essential to combat misinformation and ensure Al systems accurately interpret complex queries. Progress in Al's language abilities and a commitment to accountability, transparency, and ethics are crucial. By adopting these measures, Al can significantly enhance customer service, acting as an aid to human interaction rather than a source of confusion.

Adaptation of Customer Service Professionals

Integrating AI in customer service has led to a significant shift in how CX professionals in the field operate.

Learning to Leverage AI for Decision-Making

Service professionals are learning how to make informed decisions based on data and insights gathered from Al. It involves understanding customer sentiment, identifying patterns, and predicting customer needs.

Ethical Involvement

As Al becomes more impactful, professionals are focusing on ethical implications, advocating for Al's transparent and ethical use in customer service. Ensuring Al applications align with company values and customer expectations is a significant part of this adaptive process.

Skill Enhancement and Role Redefinition

Considering the influence of Al on customer service, 69% of high-performing service agents are actively seeking opportunities to leverage Al (source). They are focusing on enhancing their skills in emotional intelligence, critical thinking, problem-solving abilities, and empathy. The opportunity to provide human-centric service where Al falls short offers an essential redefinition of their roles.

In conclusion, customer service professionals are not only adjusting to the presence of AI but actively shaping its integration into their field. Continuing education, role modification, comprehension of AI-driven analytics, and ethical adaptability are just a few ways they're adapting to the rapidly advancing AI landscape.



You

Benefits of Al in Customer Service

By addressing and exceeding modern consumer expectations, AI is setting new standards of excellence in service delivery. Here, we explore the multifaceted benefits that AI technologies bring to customer service.

Need help! My subscription is over, and i'm trying to renew it by making a payment, but no OTPs are showing up.



Help Bot

i'm here to help you renew your subscription. I have sent a new OTP to your registered email ID jonjoy@gmail.com



Please try with the new OTP

Immediate, Round-the-ClockSupport

Generative AI introduces a transformative enhancement to the concept of immediate, round-the-clock customer support by offering a more human-like interaction. Unlike traditional chatbots that operate based on predefined scripts and responses, generative AI employs advanced algorithms that can create responses in real time, adapting to the customer's context with a more human-like understanding. It can interpret complex requests, provide personalized assistance, and learn from interactions to improve over time, ensuring that customers receive accurate and contextually relevant support at any hour.

Personalization at Scale

Al technologies have the capacity to analyze vast amounts of data and glean insights into individual customer preferences and behaviors. This allows for highly personalized interactions that resonate with each customer.

Personalization, once a painstaking task relegated to human capabilities, can now be deployed at a grand scale with precision, making every customer feel valued and understood.

Netflix is a great example of a company that uses advanced AI algorithms to personalize content recommendations for millions of users. This is achieved by analyzing individual viewing preferences, histories, and ratings. By implementing an AI-driven approach, Netflix can offer a unique viewing experience to each user, transforming its vast library of content into a curated selection that feels bespoke to every subscriber. This personalization enhances user engagement and satisfaction, demonstrating the power of AI to deliver personalized experiences at a massive scale.

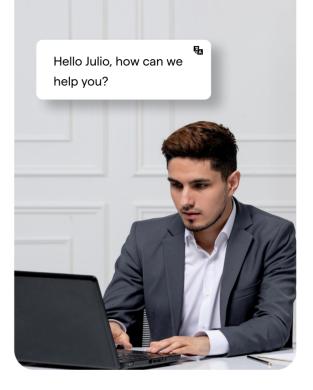


Empowering and SafeguardingHuman Agents

Al's influence in customer service is not only about automating routine inquiries but also empowering human agents with advanced capabilities. For example:

- Sentiment Analysis enables agents to recognize and respond to the emotional tone of customer interactions, ensuring a more empathetic approach.
- Machine translations break down language barriers, permitting conversations with customers in their language.
- Generative AI takes center stage by summarizing extensive customer issues and assisting in generating informed and context-relevant responses.

Another facet of Al aiding agents involves Trust and Safety. Al can identify user content that may pose risks, such as being obscene or violent, and flag it with Profanity, Toxic Language, and Unwanted Images tags. This flagged content can then be directed to specific agent queues, where personnel are trained to handle such cases.



Data-Driven Insights for Continuous Improvement

The ability of AI to collect and analyze customer interaction data is unparalleled. It can spot recurring issues, such as frequent complaints about a certain product feature or part of a service. AI can also detect trends, such as increased inquiries about new offerings or a surge in negative feedback during certain periods. Additionally, it finds service gaps, such as prolonged wait times for certain customer groups or insufficient language support. These insights enable organizations to continuously refine their customer service strategies, making them more agile and responsive to evolving customer needs and market dynamics.

5 Cost Efficiency

Implementing AI in customer service can lead to substantial cost savings. By handling a vast number of customer interactions without human intervention, AI reduces the workload on service centers. This allows for more efficient staff utilization and a reduction in operational costs without compromising the quality of customer support. According to Gartner, by 2026, investment in generative AI will lead to a 20% to 30% reduction in customer service and support agents and will create new jobs to enable generative AI in customer service and support.

Innovations are not adopted by companies at the same time. While the most innovative pioneers may encounter some hurdles in adopting new technologies, it's crucial to recognize that companies who overlook adopting Al technologies for customer service risk falling behind their competitors. Customers now expect rapid response times, precision, and personalized interactions as standard. Therefore, companies that fail to embrace Al and transform their support operations will inevitably find keeping pace with their peers' progress challenging. Consequently, the dissatisfaction of their customer base may negatively impact their retention rates. This scenario poses a significant challenge for companies hesitant to embrace change, as they may struggle to keep pace with the rapid technological advancements.



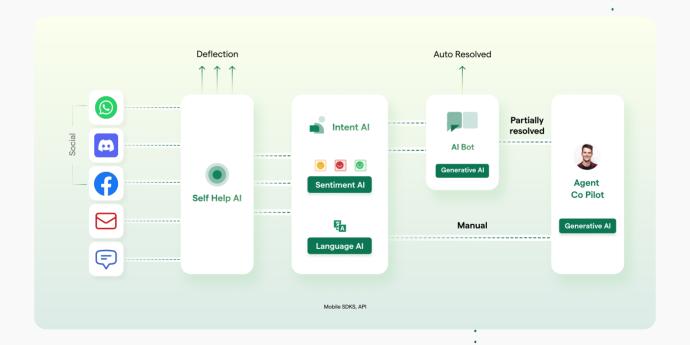
"Now, with AI, it's much easier. It helps us reduce the time to response to players. It helps us increase CSAT, especially for Asian languages, which are the most tricky ones. We did an A/B test, and for the non-translated tickets and the translated tickets, we saw an improvement of 0.5 in CSAT. It was a really good result. It's also a really good tool to optimize cost."

Sebastian Brant

Director of Player Services at Huuuge Games

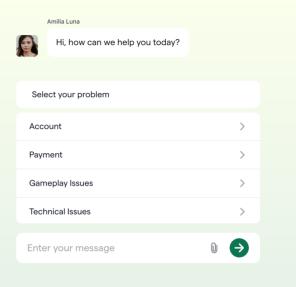
Watch the panel at Pocket Gamer London here.

Infusing Al Throughout the Customer Support Journey



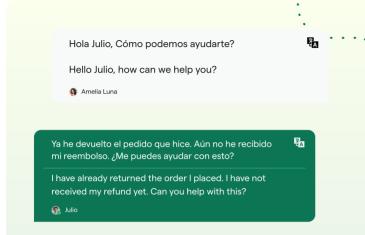
To truly excel in creating a remarkable Al Customer service system, it's vital to adopt a holistic approach from the outset, envisioning the entire system as a well-coordinated team where humans and Al collaborate seamlessly. This symbiotic relationship ensures that each component complements the other, optimizing performance and outcomes. Now, let's delve into where Al fits into this synergistic equation.

The modern customer support journey is witnessing an exciting evolution with the infusion of Al. From the moment a user seeks help, Al plays a critical role throughout their journey, ensuring a seamless, efficient, and personalized experience.



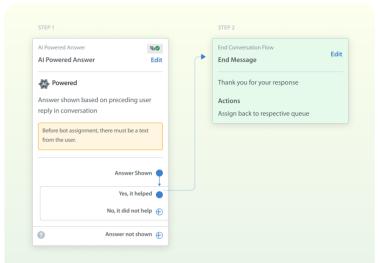
Intent Detection with Al

As a user initiates a conversation, Al jumps into action to determine the intent behind their query. This technology comprehends the issue raised by the customer based on their inputs and routes it to the most capable source of help. This results in efficient triaging of queries, bypassing unnecessary processes and leading to quicker resolutions.



Language Understanding and Sentiment Detection

Language and sentiment AI work harmoniously with intent AI to analyze customer conversations. Language AI deciphers user intent across various languages, while sentiment AI gauges emotional undertones. Together, they streamline the triage process, with bots addressing straightforward inquiries and human agents handling complex concerns. This synergy boosts the efficiency and relevancy of customer service.

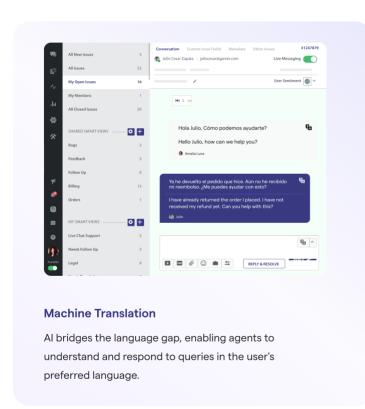


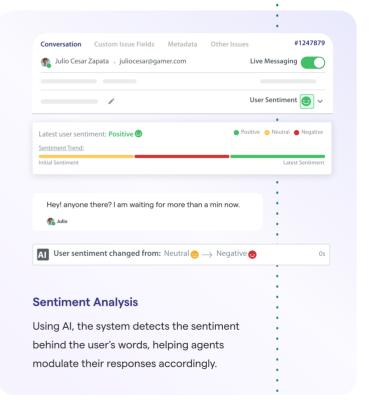
Al-Powered Chatbots and Workflows

Al Chatbots come into play once the intent, language, and sentiment are comprehended. Once this information is processed, these advanced bots use generative Al to provide instant answers to common questions or guide users through customized workflows. This can greatly improve the speed and quality of the support process, resulting in increased customer satisfaction, especially for those looking for quick resolutions.

Aiding Human Agents: AI Co-Pilot

"In cases where human empathy and discretion are essential, the support journey involves human agents. All augments their capabilities, providing pertinent features like"



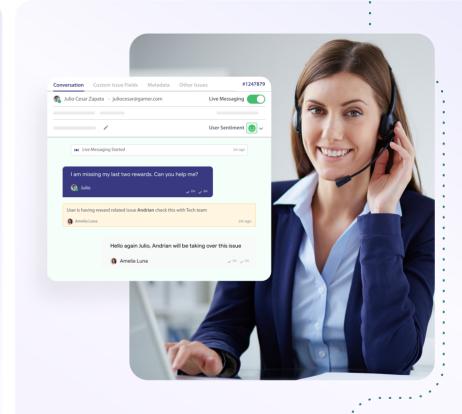


Issue Summary

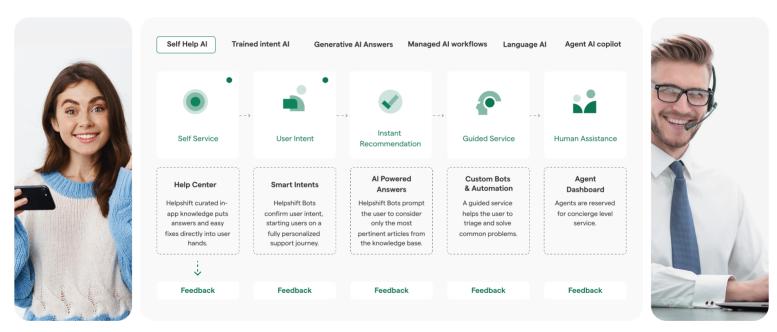
An Al-powered overview of the user's issue gives agents a quick understanding of the problem, reducing time spent on diagnosis and increasing time for resolution.

Agent Response Suggestions

Al provides real-time suggested responses, helping agents provide swift and apt replies.



At Helpshift, we lead the way in Al-enabled modern user support journeys. We've mastered embedding these Al components seamlessly into our support infrastructure, creating a well-coordinated, efficient, and empathetic support experience.



Al Infused Modern Support Journey

Integrating Al into Customer Support:

Approaches, Steps, and Comparison

here are many pathways to choose from when integrating Al into customer support, each with its own advantages. Below are step-by-step frameworks for three distinct approaches: building from scratch, leveraging Generative Al platforms like ChatGPT, and using an Al-powered CX platform like Helpshift.



Building From Scratch

Brands have attempted to build their own Al chatbots for customer service. This has the advantage of being highly optimized, however also requires a considerable amount of work.



Requirement Analysis

Identify the specific customer service needs and expectations. Also, identify data types at your disposal (Structured, Unstructured, Semi-Structured).



Al Model Development

Create machine learning algorithms from the collected data, including intent and responses. In addition, you will need to train the model with information to know when to transition to a human. If you are developing your own model, this will require a large amount of data.



Data Collection

Gather historical customer support interactions and organize your data. This means cleaning it up (removing irrelevant or incorrect information) and labeling it properly. This step ensures your Al can understand and learn from the data effectively. You will need to collect conversational data to be used to train the Al for intent detection, along with verified and correct solutions or knowledge that will be used to train the Al with a response.



Training and Testing

Use the data to train the models and rigorously test for accuracy.



Integrate and Deploy

the Al model with your customer service platform and databases, and launch the system for live customer interactions.



Chat Interface Creation

Design and develop a chat interface for customer interaction, including the security, interface, and integration into your brand.



Human Ticketing Integration

You will also need some integration with a human ticketing system so that there is a handoff to humans when needed.



Monitoring and Iteration

Continuously monitor performance and iterate to improve.



Leveraging ChatGPT

Brands have also leveraged ChatGPT and existing models, however, this still requires significant integration, especially if providing in-brand experiences and optimized responses.

API Setup

Obtain access to OpenAl's API to connect ChatGPT to your systems.

Connect ChatGPT

to the chat interface using the OpenAl API. This connection will enable ChatGPT to receive user messages and respond in real time.

Integration

Connect ChatGPT with your current customer support system. This integration will allow ChatGPT to access relevant information and take action. For instance, it can access customer information or provide information from your knowledge base.

Chat Interface Creation

Design and develop a chat interface where users can interact with ChatGPT. This can be a web-based chat widget, a chatbot on a messaging platform, or an in-app chat.

Fine-Tuning ChatGPT

To ensure ChatGPT delivers accurate and relevant responses, fine-tune the model using a pre-existing or self-collected dataset of customer support interactions. You also need to consider using RAG to provide ChatGPT with the needed information on the fly since the model may not have brand-specific data.

Human Ticketing Integration



You will also need some integration with a human ticketing system so that there is a handoff to humans when needed.



Deployment and Monitoring

Implement the solution and regularly monitor and evaluate ChatGPT's performance to ensure it provides accurate and helpful responses to customers.

Ongoing Adjustments



Refine ChatGPT's responses based on observed interactions and feedback.



Using Al-Powered CX Platforms

Al-powered CX platforms like Helpshift have the advantage that the technical legwork of Al integration has already been done, plus the additional ability to optimize the Al and workflows with brand-specific data and information.

1. Platform Selection

Choose an Al-powered CX platform that suits your business goals. Ensure Al is integrated into the entire support journey.

2. Setup and Configuration

Create an account and configure the platform to align with your workflows.

3. Integration

Integrate with your Web, Mobile, PC, and/or Console applications.

4. Customization

Utilize the platform's tools to tailor the Al and Automation to your specific requirements.

5. Live Testing

Pilot the system with control groups or specific customer segments.

6. Full Deployment

Utilize the platform's tools to tailor the AI and Automation to your specific requirements.

7. Analysis and Optimization

Use the platform's analytics to optimize and improve.



"Rovio went from 20% automation with the previous platform to 50% when they started with Helpshift, and added Al on top of it"

Samantha Pang

VP of Customer Success, Helpshift

Watch how Pascal Debroek, Player Support Lead at Rovio, implemented Helpshift and Al across 23 games and 5 studios.

Uncover their methodology to reach more than 90% automation. Click here

Criteria	Building From Scratch	Leveraging ChatGPT	Using Al-powered CX Platforms
Customization Level	Very High	Medium	Medium-High
Risk of Hallucination	Low	Medium	Low
Technical Expertise Required	Very High	High	Low
Implementation Time	Long	Medium	Short
Upfront Cost	High	Medium	Low-Medium
Reliance on External Services	Low	High	Medium
Data Privacy Control	Highest	Varies	High
Ongoing Maintenance	High	Medium	Low
Feature Richness	Custom	Dependent on API	High and Pre-built Features

These steps and comparisons provide an outlook on what to expect when choosing an approach to integrate Al into customer support systems. Building from scratch allows for extensive customization but can take longer and require substantial investment. Leveraging platforms like ChatGPT offers a balance between customization and ease of integration, with some reliance on external APIs. Using platforms like Helpshift simplifies the integration process considerably, offering an out-of-the-box solution with built-in analytics and customization tools while reducing the need for deep technical expertise.



"We partnered with Helpshift for their advanced AI features and responsive team, facilitating a fast transition from Zendesk. The fast implementation process was well structured and highly conducive to meeting the demands of our customer support operations. Moreover, the SYBO Tech Team found the SDK solution seamless to integrate and manage within the game, which was also a significant advantage for us."

Vlad Oboronko

Player Support Lead, SYBO



The Indispensable Role of Human Intelligence in Al-Driven Customer Support

Integrating AI into customer support platforms has undeniably improved efficiency and response times, but human insight remains indispensable. While the latest advances in generative AI have propelled the technology forward, they can't be compared to human agency.



It is important to calm down the excitement around the notion of workforce reduction. As we mentioned previously, Gartner has predicted that the implementation of generative AI technology will likely result in a 20-30% reduction in the number of customer service and support agents by the year 2026. However, it does not necessarily mean the live customer service function will be completely eliminated.

Human expertise is pivotal in supervising, guiding, and refining Al systems to align with complex human needs and social subtleties. Below are key areas where human insight complements and enhances Al capabilities in customer support.

"According to World Economic
Forum research, AI is projected to
create around 97 million new jobs,
potentially countering workforce
displacement concerns."





Supervision and Oversight

Al systems are powerful yet require human oversight to ensure that automated processes align with customer expectations and company values. This oversight is crucial in interpreting complex cases that Al may not fully comprehend and make judgment calls on sensitive issues.

Empathy and Emotional Intelligence

Al can simulate empathy to a degree, but true empathetic connection is a uniquely human attribute. Human agents can provide the understanding, patience, and emotional support that Al cannot genuinely replicate, vital for resolving emotionally charged or intricate issues.

Complex Problem-Solving

While AI can efficiently handle routine queries, complex problem-solving often requires human insight. Human support agents bring creativity and critical thinking skills essential for developing innovative solutions to new or non-standard issues

Training and Refinement

Al models are trained on datasets initially selected and sometimes annotated by humans, effectively learning to mimic human decision-making processes. Human agents contribute insights for Al training, ensuring the subtleties of language, sentiment, and cultural context are captured.

Ethical Decision-Making

Humans are responsible for the ethical frameworks within which AI operates. The nuances of ethical decision-making often require a human perspective to navigate the grey areas that AI might not discern.

Continuous Learning

Al can learn and adapt over time, but it is constrained by the parameters set by human developers and data scientists.

Humans identify new trends, outliers, and exceptional cases that fall outside the norm, and these insights feed back into Al systems to make them smarter.

Personalization

Beyond Al's ability to customize responses, human insight helps create deep personalization that resonates on an individual level. Human interactions can foster a connection and loyalty that goes beyond the capabilities of an Al.

VIP Customer Engagement

While AI enhances customer support efficiency, VIP clients often require an elevated service due to their financial significance.

Trained human agents dedicated to these high-value customers ensure an expertise level and personalized attention that VIPs expect and deserve, fostering client satisfaction and loyalty. Despite AI's benefits, human interaction remains vital for maintaining valuable customer relationships.

In conclusion, while Al dramatically enhances customer support capabilities, the human element is irreplaceable. It's the combination of human insight with Al-driven efficiency that creates the most effective customer service ecosystem. Maintaining this balance is the key to delivering heartfelt customer support that meets the nuanced demands of consumers.



Key Takeaways

This guide explored two critical facets of modern customer service - Artificial Intelligence (AI) and human agents, and the intricate dynamic between them. The general sentiment advocates that neither can operate at optimal efficiency without including and understanding the strengths and limitations of the other.

Al has shown immense promise in streamlining routine tasks and handling repetitive queries, enhancing efficiency and availability. At the same time, the role of human agents is critical in offering personalized service, empathy and delivering value in complex situations. The aspects of supervision, oversight, training, and injecting emotional intelligence into customer support are critical human contributions in shaping a technologically inclined domain like customer service.

However, it is equally important to be aware of Al's challenges, especially when navigating realms such as nuanced human communication, empathy, privacy and security, keeping up with rapid technological evolution, and establishing clearer paths to ROI.

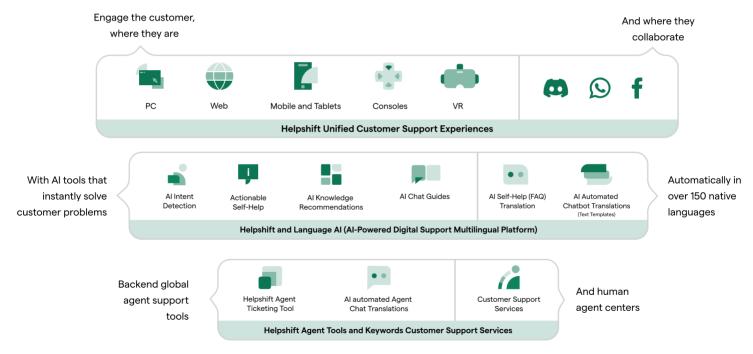
The ultimate vision for customer service in the future should hence focus on a balanced and symbiotic fusion of AI capabilities and human insights. All is undoubtedly a powerful tool that can lead to unprecedented levels of efficiency and scalability. Still, it must be coupled with the human touch to deliver a comprehensive, empathetic, and successful customer experience.

In the drive towards technological advancement, the industry cannot ignore an essential fact — customer service's core is inherently human. Incorporating AI should enhance, not overshadow, this element. Thus, our future doesn't necessarily have to choose AI over humans. Instead, it looks increasingly collaborative, where AI and humans work in synergy to fulfill customers' evolved and diverse needs.

Join the Future of Customer Engagement



Keywords Studios' Customer Engagement services and proprietary support platform, Helpshift, ensure your customers receive the support they need, whenever they need it and wherever they are.



helpshift.com