

SmarTek²¹



WHITE PAPER

Revolutionizing Aviation Industry with Gen AI: The Role of Customer and Agent Assistants

Transforming Aviation Customer Care with Customer and Agent Assistants: How IntelliTek.ai and Open AI Enhance Service Efficiency

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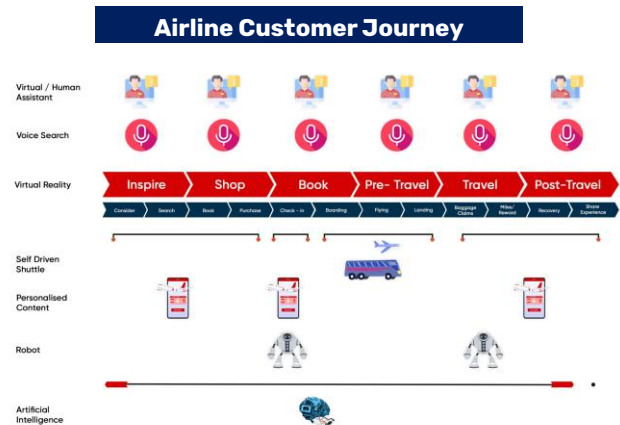
Introduction

The airline industry faces significant challenges in maintaining excellent customer service amidst increasing travel demands and operational complexities. From booking flights to handling in-flight experiences and managing disruptions, airlines must cater to millions of customers daily while maintaining seamless operations. With rapid advancements in artificial intelligence (AI), airlines are now leveraging customer assistants and agent assistants to automate services, streamline customer interactions, assist human agents, and enhance customer satisfaction.

According to a Gartner report, intelligent agents in AI (agentic AI) are set to transform the future of AI. By 2028, it's projected that 33% of enterprise software applications will incorporate agentic AI, a significant increase from less than 1% in 2024, ultimately enabling 15% of day-to-day work to be automated.

The key areas where generative AI is transforming the airline industry include predictive maintenance and flight operations, personalized customer experiences, dynamic pricing and revenue management, as well as marketing and customer engagement. Airlines like KLM, Lufthansa, and Alaska have already begun exploring AI and generative AI capabilities in their customer assistants and agent assistants to improve these functions.

This whitepaper focuses on how generative AI can be integrated in personalizing customer journeys from booking to post flight. By leveraging advanced AI technologies, airlines can reduce costs, increase operational resilience, and deliver superior passenger experience.



Our IntelliTek.ai product, augmented with OpenAI provides a secured capabilities such as advanced Natural Language Processing (NLP), Machine Learning (ML) algorithms, Large Language Models (LLM) and Optimization Algorithms, to automate customer interactions and provide personalized service at scale.

The capabilities provide a wide range of services from customer queries, to pre-flight to post flight journeys, while seamlessly integrating with human agents when more complex issues arise.

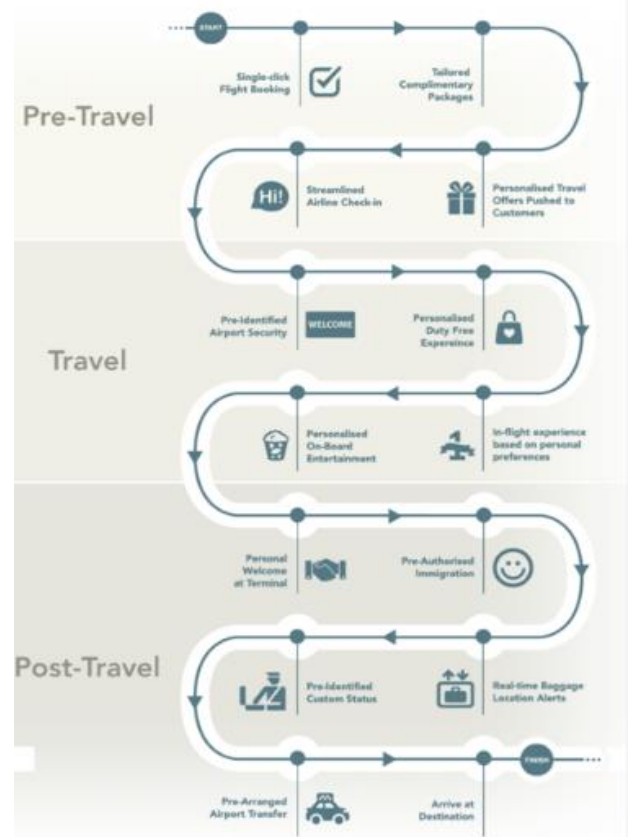
We successfully deployed secured IntelliTek.ai in the service desk operations of one of the largest Aviation partners, supporting over 18K+ flights and more than 7M+ passengers daily. This transition to an AI-automated service desk led to a 60% increase in operational efficiency, a 70+% improvement in customer service, and cost savings exceeding 50%.

We have partnered with Ben AI to enhance care centers by providing human-like AI responses (with Avatar technology) that improve customer interactions in real-time. Our integrated solutions (IntelliTek.ai + Ben AI) are designed to be adaptable across various devices, enabling businesses to deliver personalized and empathetic communication experiences.

Customer Agent Common Use Cases:

Airlines face a significant volume of customer inquiries, ranging from flight status updates, check-in requests, baggage issues, to flight cancellations and rebookings. These inquiries often overwhelm customer service teams, leading to long wait times, dissatisfied passengers, and operational inefficiencies. Implementing an AI-powered Customer Assistant that can handle a wide range of customer queries automatically and offer real-time resolutions to common problems.

Airlines such as KLM, Lufthansa and Alaska Airlines have already started experimenting with AI and Gen AI capabilities in their customer and agent assistants.



KLM Royal Dutch Airlines: KLM's customer assistant "BB" can assist with conversational booking flights, providing flight status updates, and even helping with customer service queries via social media platforms like Facebook Messenger and WhatsApp.

Lufthansa: Lufthansa uses AI assisted customer agent to handle routine customer queries about booking, flight statuses, and rebooking, helping reduce wait times and offering personalized services.

Flight Status and Notifications

Problem: Passengers constantly request updates on flight statuses, especially during delays or disruptions.

Customer Assistant Solution: The customer assistant can provide real-time flight status updates via multiple channels, such as chat, SMS, or email. By integrating with the airline's flight management systems, the assistant can automatically notify passengers of any changes, delays, or gate information.

Example Interaction:

- Passenger: "What is the status of flight LH400?"
- AI Assistant: "Your flight LH400 from New York to Miami is delayed by 45 minutes. The new departure time is 3:45 PM from Gate 24B. Would you like to receive updates on further changes?"
- Passenger: "Yes, please notify me of any changes."

Automated Rebooking and Refunds

Problem: When flights are canceled, passengers need to rebook their flights or request refunds, which often leads to long wait times with customer service.

Customer Assistant Solution: The customer assistant can automatically check the availability of alternate flights, rebook passengers, and process refunds in real time.

Example Interaction:

- Passenger: "My flight was canceled. Can I rebook for tomorrow?"
- AI Assistant: "I see your flight LH400 was canceled. I've found an alternate flight tomorrow at 10:30 AM. Shall I rebook you for this flight or provide other options?"

- Passenger: "Please rebook me."
- AI Assistant: "You are now rebooked for flight LH300 departing tomorrow at 10:30 AM. I've emailed you the updated ticket."



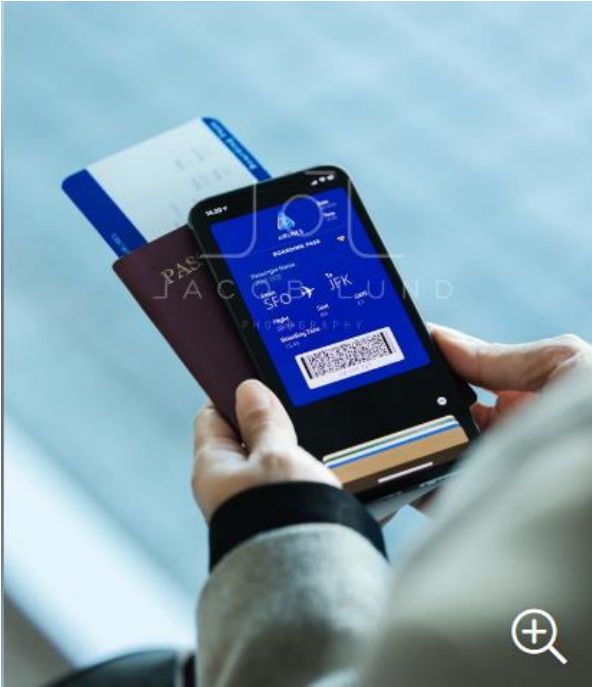
Baggage Tracking and Claims

Problem: Lost or delayed baggage is a common issue that requires immediate attention from passengers, leading to a large number of support requests.

Customer Assistant Solution: The customer assistant can track the status of baggage, initiate baggage claims, and provide real-time updates on lost baggage retrieval.

Example Interaction:

1. Passenger: "My bag didn't arrive with my flight. Can you help?"
2. AI Assistant: "I see that your baggage was delayed. It is currently enroute and is expected to arrive on the next flight at 2:30 PM. Would you like it delivered to your hotel or arrange for airport pickup?"
3. Passenger: "Please have it delivered to my hotel."
4. AI Assistant: "I've arranged for the delivery of your baggage to Hotel Sunshine. You will receive updates on delivery status."



Check-in and Boarding Assistance

Problem: Many passengers need assistance with the check-in process, boarding instructions, or seat selection.

Customer Assistant Solution: The customer assistant can help with online check-in, seat selection, and issuing boarding passes.

Example Interaction:

1. Passenger: "Can you check me in for my flight?"
2. AI Assistant: "Your check-in for flight LH400 is confirmed. You are seated in 12A. Would you like a mobile boarding pass or an email version?"
3. Passenger: "Please send me a mobile pass."
4. AI Assistant: "Your mobile boarding pass has been sent to your phone."

Handling Loyalty Program Queries

Problem: Frequent travelers often have questions about their loyalty points, rewards, or tier status.

Customer Assistant Solution: The assistant can provide detailed information about loyalty programs, such as point balances, redemption options, and tier status upgrades.

Example Interaction:

1. Passenger: "How many loyalty points do I have?"
2. AI Assistant: "You currently have 15,000 points, which are enough for a one-way domestic flight. Would you like to view redemption options?"
3. Passenger: "Yes, please show me available options for New York to Miami."
4. AI Assistant: "Here are available options for a one-way flight to Miami, starting from 12,500 points."

Multi-Language Support for International Travelers

Problem: Global airlines need to support customers in multiple languages, which is a resource-intensive process for human agents.

Customer Assistant Solution: The customer assistant can handle interactions in multiple languages using real-time translation, allowing international travelers to receive the same level of service without language barriers.

Example Interaction:

1. Passenger (in Spanish): "¿Puedo cambiar mi asiento?"
2. AI Assistant (in Spanish): "Claro, actualmente estás en el asiento 14B. ¿Te gustaría cambiar a un asiento junto a la ventana?"
3. Passenger: "Sí, por favor."

Agent Assist Common Use Cases:

The implementation of an AI-powered agent assistant in airlines can significantly improve the way customer service teams handle common problems such as flight disruptions, cancellations, and delays. By providing real-time data, personalized responses, and automated processes, these systems reduce operational burdens on human agents while improving customer experience.

Real-Time Flight Disruption Alerts

The AI assistant integrates with the airline's flight management system to monitor flight statuses. When a delay or cancellation occurs, it immediately notifies customer service agents, allowing them to prepare for a potential surge in inquiries.

Example: A flight from New York to London is delayed by 3 hours due to weather conditions. The AI assistant automatically alerts the agent team of the situation and provides alternative rebooking options.



Automated Rebooking and Refund Suggestions

When a passenger contacts an agent regarding a delayed or canceled flight, the AI assistant can instantly pull up alternative flight options, as well as the airline's rebooking and refund policies. The agent is presented with a list of options to offer the passenger.

Agent Interface:

The agent sees the available flights within the next 24 hours and suggested scripts for offering compensation, accommodations, or rebooking.

If the customer is eligible for a refund or compensation, the assistant generates the appropriate information for the agent to relay.

Example Interaction:

1. Passenger: "My flight was just canceled. What can I do?"
2. Agent: "I see your flight to London has been canceled. We have an alternative flight at 6:00 PM today, or I can rebook you on a flight tomorrow at 9:00 AM. Which would you prefer?"

Instant Access to Customer Data

The AI agent assistant accesses the passenger's booking history, loyalty status, and special preferences (e.g., meal types or seating arrangements). It provides this information to the human agent in real time, allowing for a more personalized response.

Example:

1. The agent assistant notes that the passenger is a frequent flyer with a premium loyalty status and suggests offering a complimentary seat upgrade for the next available flight.
2. Agent: "As a valued Gold member, I've upgraded you to a business class seat on the next available flight."

Automating Compensation and Voucher Issuance

The AI assistant helps agents handle compensation issues such as food vouchers, hotel accommodations, or transportation in the event of extended delays or cancellations. It automates the process of issuing vouchers based on the airline's compensation policies.

Example:

1. Passenger: "I've been waiting for five hours. Am I eligible for compensation?"
2. Agent: "I can issue a meal voucher and arrange a hotel for your overnight stay, as the next available flight departs tomorrow morning. You will receive the vouchers shortly via email."

Suggested Responses and Consistency

During high-stress scenarios, such as large-scale delays or system outages, consistency in communication is crucial. The AI assistant provides agents with pre-approved responses that adhere to the airline's policies, ensuring uniform service quality across multiple customer touchpoints.

Example: The assistant can recommend:

1. "I apologize for the inconvenience. We understand how frustrating this is, and we will do our best to assist you."
2. It ensures that all agents are offering the same options and using consistent language.

Real-Time Translation for International Passengers

Many airlines cater to a global audience. Agent assistants equipped with translation capabilities can provide real-time language support, allowing agents to communicate with passengers who may not speak the same language.

Example:

A French-speaking passenger contacts the airline's support team. The AI assistant translates the agent's English responses into French in real time, ensuring smooth communication.

Handling High Volumes of Calls with Prioritization

In cases where many flights are delayed or canceled simultaneously (e.g., due to weather), the AI assistant helps agents prioritize high-value customers (e.g., loyalty members or passengers with urgent connecting flights). It can also automate responses to the most common inquiries, reducing the need for direct agent involvement in every call.

Conclusion

Customer and agent assistants represent a significant opportunity for airlines to enhance customer experiences, reduce operational costs, and increase efficiency. By automating routine tasks, providing real-time support, and assisting human agents, these AI-driven systems allow airlines to meet the demands of modern travelers while maintaining a competitive edge in the aviation industry.

About Us

Company

We hyper-focus on our clients' success in transforming revenue growth and customer engagement outcomes. We've helped our clients accelerate revenues and improve costs. SmarTek21 is customer Obsessed.

Our Talent

250+ global tech experts in AI, application development, cloud, data, and microservices. Agile onshore/offshore models deliver client advantages across the Americas, India, and Europe.

Commercial Advantage

Global presence enabling flexible onshore/offshore agile delivery, optimizing efficiency and scalability across industries. Utilizing a Global Delivery Service Framework.

Our Innovation

Pioneering AI and automation solutions fuel client innovation, receiving multiple Gartner accolades, including Magic Quadrant for our Conversational AI.