Omilia
Conversational Intelligence

Case Study



AI Meets the Drive-Thru:

Taco Bell's Journey to Automated Customer Service

Customer

Taco Bell is a culture-centric, lifestyle brand that provides craveable, affordable Mexican-inspired food with bold flavors. Taco Bell and its franchise organizations operate 9,000+ restaurants in over 34 countries, serving millions of fans around the globe each week.

TACO BELL™

Challenge

Taco Bell was looking for impactful AI initiatives that enhance team member and customer experience, operational efficiency and business performance.

Given most customer interactions occur at the drive-thru, it was important for Taco Bell to continue modernizing restaurant operations. To do so, the brand looked for new, innovative ways to optimize back-of-house operations with technology.

To meet these demands, Taco Bell sought an AI-driven voice ordering solution that could help improve the customer experience, reduce friction in drive-thru interactions, and empower team members to focus on customers.

By streamlining certain tasks, the Taco Bell team was able to focus their attention on the customer, improving and enhancing the customer journey experience overall.

> "Innovation is ingrained in our DNA at Taco Bell, and we view Voice AI as a means to improve the team member and consumer experiences. Tapping into AI gives us the ability to ease team members' workloads, freeing them to focus on front-of-house hospitality. It also enables us to unlock new and meaningful ways to engage with our customers."

Dane Mathews
Global Chief Digital & Technology Officer, Taco Bell

Solution

Value Driven Implementation

For Taco Bell's initial exploration in voice automation, the brand selected Omilia's Voice AI Solution for its specialization in voice automation solutions tailored to customer service environments.

Taco Bell deployed and tested the Voice AI Solution with Omilia. This proof of concept was then rolled out at one restaurant in Irvine, CA, followed by four more pilot locations in 2023, where Taco Bell continually measured performance metrics and gathered feedback from restaurant teams and franchisees to ensure the Voice AI Solution was performing as expected.

Omilia's Voice AI Solution stays up to date with menu innovations and new product names as they roll out and is continually fine-tuning the engagement between the customer and the Voice AI Solution.

The customer and Voice AI conversation flows are constantly being optimized, and new capabilities are being added to personalize the customer experience.

Operationalize the Voice AI Solution - To operationalize the Voice AI Solution, Taco Bell and Omilia aligned on a strategy with a clear business case, designed governance and communication plans, and developed a change management plan in close collaboration with franchisees to overcome any adoption hurdles.



Maintenance, Enhancements & Testing Strategy - Taco Bell prioritized and planned feature enhancements based on feedback from team members, franchisees, corporate partners, and customers, as well as business goals, and conducted User Acceptance Testing to validate new features and enhancements.

Drive Continual Digital Innovation - Taco Bell is leveraging Generative AI to create a more enjoyable customer experience with a tool that better understands humor, slang, natural conversational cadence, and certain frequently asked questions. Additionally, the solution can be deployed completely over-the-air, speeding up large-scale deployment.

The Technology

Drive-thru ordering environments present unique challenges for voice recognition technology, as the Voice AI Solution must accurately interpret a wide variety of human accents, speech patterns, and vocabulary in real-time. This complexity is further amplified by background noise — from passing traffic to car engines — that can disrupt the Voice AI Solution's ability to process and respond accurately.

The Omilia Voice AI Solution provides:



Specialized Voice Models: A Proprietary deep neural network-powered Automatic Speech Recognition (ASR) provides context-sensitive speech-to-text



Natural Language Understanding: The Voice AI Solution understands words and their intended meaning, providing contextual responses with high accuracy and minimal training input.



Noise Filtering: This model reduces and/or removes background noise from the isolated voice segments provided by Voice Activity Detection (VAD). By filtering out unwanted sounds like engines or side conversations, Noise Filtering ensures that the captured speech remains clear and intelligible, enabling the Voice AI Solution to focus on the customer's words alone.



Latency Removal: Voice is synchronous in real-time, so the ability of the Voice AI Solution to listen, understand, and respond in real-time is key to a successful deployment. Delayed or out-of-context responses will lead to failed customer engagements.



Real-time Menu Adaptation: Different stores and regions have different menus, different levels of stock, and stock is influenced by specific, limited-time offers. The Voice AI Solution can adapt in real-time to different stores' menus, changing offers, and stock levels to ensure orders are accurate and completed successfully.

Results

As of April 2026, the Omilia Voice AI Solution has been deployed in 890+ Taco Bell U.S. stores.

Customer First

Taco Bell recognized the importance of providing a seamless, human-like experience for customers, so Omilia's Voice AI Solution was meticulously tuned to provide clear, accurate responses, delivering a conversational experience that mirrors human interaction and improves the customer's ordering experience.

Transaction time, from when a customer pulls up to the drive-thru speaker post to when they get their food, with Voice AI is on par with, and in some cases faster than, traditional order-taking methods.

Happy Employees

The Voice AI Solution has also eased the workload of team members, allowing them to focus on tasks that enhance the guest experience. By handling repetitive interactions, the Voice AI Solution empowers employees to prioritize quality service, creating a win-win outcome where customers enjoy a smoother experience, and employees can engage in more impactful roles.

Early indicators point to turnover reduction at Taco Bell corporate locations using Voice AI compared to non-Voice AI locations. Additionally, Taco Bell is using a targeted rollout to help ensure total sales and transactions at stores utilizing the Voice AI Solution are on par or better than stores without the Voice AI Solution.

Hear more on how **Taco Bell is using AI voice to take orders at drive-thru.**

About Omilia

Omilia is a leading AI platform for customer service. Omilia owns and provides state-of-the-ar t technology in Conversational AI, enabling clients to impr ove their CX, shorten response times and reduce costs. In addition, the Omilia Cloud offering allows businesses to effortlessly identify, authenticate and serve customers with ready-to-go integrations, acr oss any channel, by pre-built solutions.