



## CASE STUDY: Global quick service restaurant chain orders up fast data-driven solutions

### Background

#### Big data environment drives complex business analytics

The Wavicle team first started working with this international quick service restaurant (QSR) chain to diagnose and solve problems with the company's data warehouse. Over the next 10 years, the companies forged a close working relationship in which they continue to keep the QSR's big data environment running smoothly, while they answer difficult business questions based on complex analytics.

### Primary Challenges

#### Data-driven business decisions

Active in 65 world markets, this company needed a bigger, more scalable environment to manage its global data, run daily executive reports, and fuel business analytics about everything from menus and promotions to kitchen design and supply chain.

The company needed a partner that could align the business with data and technology. A common challenge was for business leaders to understand the data that's available and to go beyond basic metrics to measure performance, increase sales, and improve operations. Additionally, based on the need to manage increasing volumes and types of data from hybrid environments, the company wanted to migrate to a cloud data warehousing environment.

### Ongoing Solutions

#### Cloud migration and business analytics

As a long-time solution provider for this QSR, Wavicle guided the migration from the company's legacy Teradata warehouse to an Amazon Redshift cloud data warehouse using Talend for data integration and Tableau for data visualization.

With this robust, scalable environment in place, the company has a single source of truth for daily and weekly trend reporting as well as more sophisticated analytic endeavors for thousands of restaurants. The QSR continues to rely on Wavicle for its industry expertise and analytic strengths to leverage all types of data to solve specific business problems.

## Real Results

### Driving successful business strategies and actions with big data

The Wavicle team works with the QSR to help frame business problem statements and deliver actionable answers and insights based on data preparation, predictive analytics, trend analysis, and reporting. Here are some use case examples:

**TEST-TO-MARKET (TTM) INITIATIVES:** Used non-SQL unstructured data, big data technologies, and visualization tools to deliver self-serve reports for business insights plus a clear framework for TTM measurement. Realized an 87% improvement in the efficiency of data analytics delivered.

**MARKET BASKET ANALYSIS:** Determined that special “free” menu item offerings did not drive anticipated additional purchases triggered by getting customers in the door with a limited special offer.

**MENU AND FOOD PREPARATION ANALYSIS:** Analyzed multiple factors to determine impact on grill time and space with the introduction of new menu items. Confirmed that this could be successfully accomplished with current kitchen setups, avoiding millions of dollars in capital expenditures and having no significant impact to sales generated from existing menu items.

**FOOD-ON-DEMAND DELIVERY SERVICES:** Collected and analyzed key performance indicators (KPIs) such as customer satisfaction, average check sales, guest counts, and total delivery time to measure growth and performance of restaurants on deliveries made in partnership with UberEats and other delivery services.

**PRODUCT MIX CLASSIFICATION:** Tracked shifts in trends and demands based on food classifications, with reports tailored to meet the varying needs of global markets.

**SUPPLY CHAIN:** Provided insights into supplier quality management systems, supplier workforce accountability, general supplier information, brand protection, sustainability, and costs across distribution centers, suppliers, transactional cost points, and stores.

**SEASONALITY ADJUSTMENT TIMELINES:** Evaluated the impact of seasonality and holidays on product sales with a predictive analysis for improving sales and strategies to combat sales dips during weather events and natural calamities.

**EXECUTIVE REPORTS:** A two-day consultation optimized the client’s global data warehouse system so that daily reports from the top 10 markets could be generated in just 9 seconds, instead of 3-to-4 hours.

## About Wavicle Data Solutions

Wavicle Data Solutions delivers data and analytics solutions that help global organizations achieve business results. Our expert staff is committed to knowing everything there is to know about modern data, cloud, and analytics technologies and how they can be used to drive current and predictive insights about your business. From strategy through execution, we have proven that we can deliver in any environment, blending traditional and emerging technologies that fuel smarter decisions and stronger companies.

