wavicle
DATA SOLUTIONS

McDonald's orders up fast data-driven solutions

Big data environment drives complex business analytics

The Wavicle team first worked with McDonald's, the leading global foodservice retailer, to diagnose and solve challenges with its data warehouse. Over the next 10 years, the companies have continued working together to manage complex data challenges, while answering difficult questions about the business.

Aligning business, data, and technology

Active in 65 world markets, McDonald's 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.

Cloud migration and analytics

Wavicle guided the migration from a legacy Teradata warehouse to an Amazon Redshift cloud data warehouse using Talend for data integration and Tableau for data visualization.

This robust, scalable environment provides a single source of truth for daily and weekly trend reporting as well as more sophisticated analytic endeavors for thousands of restaurants.

McDonald's continues to rely on Wavicle for its industry expertise and ability to leverage all types of data to solve specific business problems.

Data-driven business results

The Wavicle team works with McDonald's 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-service reports for business insights and a clear framework for TTM measurement. Realized an 87% improvement in the efficiency of data analytics delivered.

MARKET BASKET ANALYSIS

Determined the effects of limited special offers on getting customers in the door and increasing purchase size.

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, with no measurable impact on 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 third-party 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 effect 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.