

Case Study: Travel & Hospitality

AI Intelligence Unlocks Fast Food Insights

For fast-food chains, the difference between profit and loss rests on the edge of a knife, at least metaphorically speaking.

They need to provide the quick, tasty meals that hungry consumers demand, but they also need to hold down costs and retain competent staff. All of this is a tall order without the real-time data needed to give a window into operations at each outlet.

A large North American fast-food chain needed to move away from its on-premise legacy data warehouse. The chain's management was not able to access relevant performance reports in a timely fashion. They also needed data visibility to better plan its inventory and staffing at its North American store locations.

In addition, their legacy architecture was expensive and burdensome to maintain. Restaurant management knew it was long past time for the company to move to a cloud-based environment. Our proposal featured a data warehouse cloud migration initiative that would result in faster time to report, better data accuracy and lower maintenance costs while increasing flexibility, scalability and customer engagement. This included artificial intelligence (AI)-driven

At a glance

One of the largest U.S. based fast-food companies needed better insights and visibility for decision-making, more self-service offerings for franchisees and to improve diner experience through expanded loyalty offerings.

To achieve these objectives, the company retired its on-premise data warehouse and moved to the Cognizant AI Data Modernization Platform.

Outcomes

- 4,000 North American stores provide real-time access to the data warehouse information, increasing data accuracy.
- 10% reduction in average order time per drive-through customer.
- Significant cost reduction due to the near elimination of software licenses.
- Insights are now disseminated widely, enabling business users to quickly build custom reports.

personalized customer experiences and marketing intelligence reports.

Getting ahead of conditions

Weather is one of the most volatile factors affecting the fast-food industry. Previously, managers had no way to plan for weather events other than just looking at forecasts on the news or web. In its new data warehouse, the restaurant chain wanted to leverage an external feed of weather data along with internal staffing information, allowing managers to make optimal decisions depending on conditions. Alerts from the data warehouse would help managers so that they could preempt problems.

An array of accurate reports

The Cognizant AI Data Modernization Platform ensures data quality, data-access management and connects to real-time regional weather data. We used agile development practices, with deliverables appearing in two-week sprints. Our solution is based Microsoft Azure Data Factory/USQL for data lake and analytics as well as Informatica for data ingestion.

Reporting has greatly improved. Previously, the finance team spent one hour creating a sales summary report every morning. Now, the system generates the daily report automatically.

The restaurant chain now has 4,000 stores in North America that are uploading data to the warehouse in real time. Users leverage this data to create a wide variety of reports. Brand managers can easily view the daily business summary by region, product and other variables.

Additional reports

- **Senior-Management Dashboard**—helps top leaders track intra-day sales to ensure projections are being met.
- **Delivery Dashboard**—tracks deliveries and helps train employees on delivery sales.

- **Operations Scorecard**—a dashboard for the operations team that delivers quick insights on sales, product mix and promotions/discounts as well as a single view of data consolidated from multiple locations. Metrics from the operations scorecard show how the company is doing at achieving its strategic vision, recognizing top performers and highlighting franchisee growth eligibility.

- **New Product Release Tracking Scorecard**—lets the marketing team understand how its promotional efforts are performing.

The power of real-time data and intelligence

The restaurant chain is also using big data and AI to improve operations on the ground. It now has a real-time data feed at each outlet's order and delivery window to pinpoint and resolve any bottlenecks in the drive-through processes, speeding order processing and problem resolution, contributing to better customer experience.

One of the major benefits of cloud is that, in the future, the company can scale its use of the platform as needed. This new cloud-based data warehouse architecture has driven cost savings and added flexibility.

The system also drives benefits in customer engagement and staff retention. The company plans to increase diner options in its loyalty program based on customer feedback—sure to be a popular feature. And, in an industry plagued by frequent employee turnover, the company is implementing a game-based program that rewards employees for the highest sales and other behaviors. For this restaurant chain, leveraging data on a cloud-based intelligent platform is the catalyst that has enabled it to gain insights, build customer relationships and improve operations, achieving its overall goals of increasing revenue and reducing costs.

About the Cognizant AI Practice

As part of Cognizant Digital Business, Cognizant AI provides advanced data collection and management expertise, as well as artificial intelligence and analytics capabilities that help clients create highly-personalized digital experiences, products and services at every touchpoint of the customer journey. We apply conversational AI and decision support solutions built on machine learning, deep learning and advanced analytics techniques to help our clients optimize their business/IT strategy, identify new growth areas and outperform the competition. Our offerings include Insight to AI, Customer Intelligence, Intelligent Automation, Product Intelligence, and Risk & Fraud Detection. To learn more, visit us at www.cognizant.com/ai/data-platform.

About Cognizant

Cognizant (Nasdaq-100: CTSI) is one of the world's leading professional services companies, transforming clients' business, operating and technology models for the digital era. Our unique industry-based, consultative approach helps clients envision, build and run more innovative and efficient businesses. Headquartered in the U.S., Cognizant is ranked 193 on the Fortune 500 and is consistently listed among the most admired companies in the world. Learn how Cognizant helps clients lead with digital at www.cognizant.com or follow us @Cognizant.

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