



Case Study

Customer engagement innovation for retail business

Client

Retail Chain

Client is a U.S.-based retailer with nearly 3,000 stores throughout 34 states. The company sells millions of stock keeping units (SKUs) each year through its stores, however was facing several challenges as they attempted to scale up offerings in the digital, online marketplace. OnX sister company CBTS was able to jump in and quickly assist the company.

Challenge	Solution	Results
<ul style="list-style-type: none"> • Speed to market for digital services, with increasing competition in the marketplace • Lack of resources to support ability to scale up quickly • Burstable workloads • Technical debt • Limited work space to accommodate additional resources • Network bandwidth due to a dispersed workforce demographic 	<ul style="list-style-type: none"> • CBTS provided two scrum teams consisting of a scrum master, product owners, lead technical developers, developers and software development engineers of test (SDET). • CBTS took ownership of two digital services. Application ownership includes new development, implementation, and support. • CBTS provided new office space for the agile teams to remediate the client's work space challenge. • CBTS set up a dedicated, large Gb bandwidth to minimize the network-related challenges. 	<ul style="list-style-type: none"> • Improved the client's speed to market to reach consumers with new products, services, and offers before their competitors. • Seamless integration model was built to scale based on the demand via independent, self-sufficient, and agile teams. • Provided dedicated network line for the client to minimize the network-related challenges for remote offices.

Background

Retail shopping is changing rapidly, and the client is making major investments into promoting innovation to stay ahead of the competition. The client recognizes that today's customers are attracted to businesses that cater to their customers and design their business models accordingly.

The client has designed a personalized experience for each customer that demonstrates a customer-centric business model. The client's personalization team is utilizing data analytics for individual and household buying trends to facilitate a customer-focused experience.

The client also wants to position themselves as a food industry authority and build larger baskets by creating a best-in-class meal planning destination, and by reaching customers through real-time e-mail marketing. This e-mail marketing effort is aimed at increasing the client's market share in the meal plan business.

The client's personalization team develops and supports many back-end services to enhance the overall personalized customer experience. Some of the most popular services they support include:

- Providing customers with the products they regularly purchase and are likely to purchase again through the store's app experience.
- Identifying the products each individual customer has purchased in the past and that are currently on sale.
- Cataloging products that were recently purchased by the customer either through the retail store or through an app.
- Providing recipes that may be of interest to any consumer.

Business Challenge

Business and technology challenges the client faces include:

- Speed to market for digital services, with increasing competition in the market place.
- Resource constraints to support the ability to scale up quickly.
- Technical debt.
- Burstable workloads.
- Limited work space to accommodate temporary resources.
- Network bandwidth due to a dispersed workforce demographic.

Solution

The client engaged CBTS to own the implementation, delivery, and support of the services that are increasingly part of this digital space. CBTS provided two autonomous scrum teams consisting of a scrum master, product owners, lead technical developers, senior developers and software development test engineers (SDET) to support the client's personalization team.

Solution (continued)

In addition, CBTS has established a repeatable framework that supports the personalization team's need to scale with the ability to add additional scrum teams. The CBTS team is positioned to take ownership of the customized application development and e-mail marketing services, including the new development work needed to support the customer engagement growth and e-mail marketing product roadmaps for the client. This will allow the customer to leverage data science to analyze the customers' buying trends and predict consumption habits and interest while promoting healthier living.

CBTS also provided the client with an office facility to remediate their work space challenge and addressed network-related challenges through the installation of a dedicated site-to-site VPN tunnel between the client's location and the office facility.

CBTS app development services Included:

- Java 8, J2EE
- MicroServices
- Spring Boot Strap
- NoSQL (Mongo and Cassandra databases)
- Neo4j Graph Database
- Pivotal Cloud Foundry (PCF)
- Apache Kafka

Results

- Improved the client's speed to market to reach consumers with new products, services, and offers before their competitors.
- Seamless integration model was built to scale based on the demand via independent, self-sufficient, and agile teams.
- Provided dedicated network line for the client to minimize the network-related challenges for remote offices.
- Addressed the client's real estate and office space challenges by providing them with office space.