Capgemini

Smooth online ordering from confirmation to delivery with Capgemini

ADMnext completely digitalizes a global retailer's ordering process with an intuitive, state-of-the-art application

Tracking orders for better deliveries

In the age of information symmetry, customers can find everything they need to know about competing retail products in an instant. Now, there are only limited ways in which a retailer can truly differentiate themselves from competitors.

One way is through customer experience – and in modern retail, order delivery plays a critical role. Customers want to hold their order in their hands as soon as they purchase it and unbox it as soon as they receive it. So, an estimated delivery date and time, and real-time updates on order status and location are crucial. And with the large uptick in online grocery shopping, companies themselves want to gain a complete view of order deliveries to help them with efficient carrier assignment, optimization of delivery routes, reduction in misplacements, and faster delivery.

Overview

Client: An established European global retailer

Sector: Retail

Client Challenge:

With an online shopping portal now in place, this European global retailer was looking to use real-time information to effectively monitor customer orders and provide maximum customer satisfaction

Solution:

Capgemini's ADMnext helped the client develop and implement a state-of-the-art application with next-gen technology solutions to completely digitalize their order tracking and monitoring

Benefits:

- Customer experience ratings improved by 80%
- Enhanced carrier efficiency
- Increase in number of daily orders shipped
- 50% decrease in order misplacement incidents
- Increased administrator productivity

While the retailer was able to quickly ramp up online shopping capabilities in response to a sharp rise in online orders, its growth potential was restricted due to poor visibility of product movement. The organization depended entirely upon on the information provided by their various forwarding partners. Hence, there was an urgent need for building an in-house system. To deliver complete visibility and guarantee a smooth customer experience from order confirmation to delivery, the organization approached Capgemini's ADMnext to help it build a state-of-the-art application with next-gen technology and completely digitalize its order tracking and monitoring.

Delivering with ADMnext

In creating this application with ADMnext, the Capgemini delivery team developed a prototype for a single store and a handful of carriers to ensure that application functionalities were in line with the retailer's requirements. Next, Capgemini scaled the application to more than 50 stores and over 1,000 carriers, while also enabling additional functionalities such as digital signatures, bar code scanning, and order-path visualization for respective application modules. The Capgemini delivery team leveraged JBoss technologies for both back-end and front-end development. Once the application was deployed, it was handed over to the Capgemini application maintenance team, which was already responsible for providing continuous support, future enhancements, and transformation of all applications under Capgemini's previous agreements with the retailer.

In managing these applications, Capgemini was able to sense the growing needs of the organization and its customers. The retailer's application portfolio kept on expanding to meet the growing needs of the customer and to harness the full value of each application, it launched an initiative to move towards a loosely coupled, microservice-based architecture. The key objective was to unify the critical elements of its landscape so that new feature development would simply become a configuration process. Capgemini supported this transformation initiative by moving all existing applications to the target architecture. This required an assessment of the individual requirements for each application and then the execution of the necessary steps for application migration.

In implementing the order tracking application, Capgemini embarked on a four-month journey with the business to migrate to a microservices-based architecture. This was based on ADMnext's Application Modernization Principles and required the isolation of different functionalities into specific microservices and the configuration of the deployment into the Openshift container platform. Capgemini designed a blueprint based on the target architecture for deployment sequence and integration and then employed agile methodologies to redevelop and test the necessary components before deployment to the new environment. The Capgemini delivery team leveraged Sencha for front-end and a propriety Devon framework (based on Hibernate object-relational mapping and Spring technologies) for the back-end. Apache Kafka (an open-source stream-processing software platform) was used for application messaging.

As Capgemini continues to evolve the retailer's architecture and help the organization reap the benefits of continuous integration, the next step is to move the entire set of application modules to the OpenShift container platform and migrate the database from Oracle DB (an all-in-one cloud database) to PostgreSQL (an advanced open source database). After this, the partners will implement a Kibana dashboard (a collection of visualizations, searches, and maps in real-time) for quick incident resolutions will be implemented. Through this initiative, Capgemini will help the organization achieve scalable, decentralized, and agile systems.

Overall, Capgemini has delivered the following benefits throughout this engagement thus far:

- 80% improvement in customer experience ratings through real-time order tracking and faster deliveries

- Enhanced carrier efficiency with optimized delivery assignment and route allocation

- Improved efficiency that has led to an increase in the number of daily shipments

- 50% decrease in order misplacement incidents through better monitoring

- Increased administrator productivity through more accurate order info and updates on carrier activities.

The road ahead with ADMnext

After developing and implementing this state-of-the-art ordering application, the retailer and Capgemini are now planning to expand the relationship even further with application migration to Google cloud and thermograph integration with the mobile application, which will enable the carrier to ensure the freshness of food packages.

Additionally, Capgemini is looking to help improve order rejection management for reverse logistics and extend geofencing functionality to store the arrival and departure timestamps from the destination. Finally, the retailer plans to work with Capgemini to develop a new module that tracks goods movement from the supplier to the distribution center to offer its employees and customers an even smoother and more rapid delivery experience.

About Capgemini

Capgemini is a global leader in consulting, digital transformation, technology and engineering services. The Group is at the forefront of innovation to address the entire breadth of clients' opportunities in the evolving world of cloud, digital and platforms. Building on its strong 50-year+ heritage and deep industry-specific expertise, Capgemini enables organizations to realize their business ambitions through an array of services from strategy to operations. Capgemini is driven by the conviction that the business value of technology comes from and through people. Today, it is a multicultural company of 270,000 team members in almost 50 countries. With Altran, the Group reported 2019 combined revenues of €17billion.

Learn more about us at
www.capgemini.com

People matter, results count.