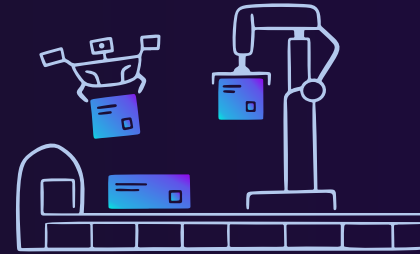# Shelf-Availability Detection and Improved Restocking

EDDI   captana

Challenge

Out-of-shelf situations are still a key pain point for today's retailers. Besides the direct revenue loss for not-in-time restocked products, the common unavailability of goods significantly reduces customer satisfaction.

By having a tool that helps us visualize what our customers see in the store in real-time, we can identify potential operational restraints and streamline restocking to increase efficiency in this process and improve on-shelf availability and thus higher customer satisfaction.

Solution

Captana, a german based tech-startup acquired by SES-Imagotag in 2016, offers shelf-edge wireless IoT mini cameras (Captana ShelfEye). These cameras capture and analyse on-shelf availability in real-time.

Utilising computer vision and artificial intelligence, modern image detection algorithms can analyse the captured images to identify shelf gaps while operating fully compliant with all privacy protection laws.

These insights (accessible via the Captana Dashboard) into our shelves and the transparency of out-of-shelf situations (accessible via the Captana Live App) help us to ensure an optimized OSA and improved restocking processes by constantly monitoring all SKUs.

Proof-of-Concept

To validate the benefits of using a shelf availability monitoring solution, 130 and 320 Captana ShelfEye mini cameras were installed respectively in three different EDEKA stores in northern Germany. We deliberately chose these stores to participate in the PoC because of their retail space size and specific location to differentiate the effects between different stores. During the PoC phase, we are also in close contact with our merchants, who run these stores independently and are fully responsible for all processes and their implementation to ensure optimal operation and communication with the store's employees.

EDEKA Digital, the IT subsidiary of the EDKEA headquarters, in collaboration with EDEKA Nord quickly realized the technical link between the Captana Live App and our inventory management system to retrieve the real-time stock of all products in the store. This data is needed to improve the restocking process, distinguishing between refillable out-of-shelf situations and shelf gaps due to out-stock, where the missing products cannot be restocked.

Results

3 stores in **6** months   **42 493** monitored SKUs

574 installed mini cameras

The main goal of our PoC is to quantify the benefits of the solution for our stores by evaluating different data sets and supporting our findings with employee feedback. Furthermore, the PoC furthermore serves as a basis for deciding a national roll-out recommendation.

Conclusion

Since the PoC for the Captana solution is still operational, we expect the final evaluation of our findings to be done in October of this year. Therefore, currently we cannot make any conclusive statements about the benefits of the Captana solution in our stores.

> " As the store with the highest foot traffic in northern Germany, we are faced with the major challenge of avoiding shelf gaps. Our claim to customers is to have the right item, at the right time, in the right place. As this is not always easy, we have brought in a great innovative solution: Captana, a camera-based shelf analysis tool. One goal is to close the shelf gap, and the other is to increase the advisory service.

Stephan Cunäus
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