Loblaw Digital

Optimizing retail wayfinding for time savings

Introduction

In order to better serve the retail market, Mappedin wanted to create a grocery-focused feature set that would allow store owners and operators to make real-time changes to layouts and product locations, while providing picking efficiencies for store associates.

In retail, information is key, and we knew that if we could bring the same ease-of-use to a retail feature as existed in our CMS, our products could show significant time savings. We wanted to test our product in a physical retail environment and prove that mapping could play a part in improving operational processes to maximize store employees' efforts.

As an innovative retailer, Loblaw Digital is constantly on the hunt for ways to create efficiencies that can improve day-to-day operations, while also driving their digital strategy forward. As part of that focus, Mappedin had an opportunity to test the hypothesis that integrating a mapping solution could help the efficiency of their Click and Collect program.

The Test

The solution was tested in two stores and across a variety of scenarios. The first step was to map the physical store locations to ensure all geometry and location data was accurate. The second step was to implement the optimized picking paths in an app and run comparisons beside non-app runs. This helped validate that optimized pick paths could reduce the overall distance and time travelled by store associates.

Varying Sources: The feature set was developed using several sources of data, including interviews with employees familiar with the current process. After employee interviews, we created a routing algorithm to test against the baseline in order to track time efficiencies. The routing algorithm used in the solution was created and derived from ant colony optimization techniques to augment the human aspect of this process.

Details to Data: Barriers to efficiency, like picking time per order, needed to be accounted for in the feature planning to avoid dips in service quality. This included offsetting for convoluted routes, or multiple trips back to the order desk to reduce potential for missed items. This better enabled their employees to complete tasks and continue the organization's operational excellence.
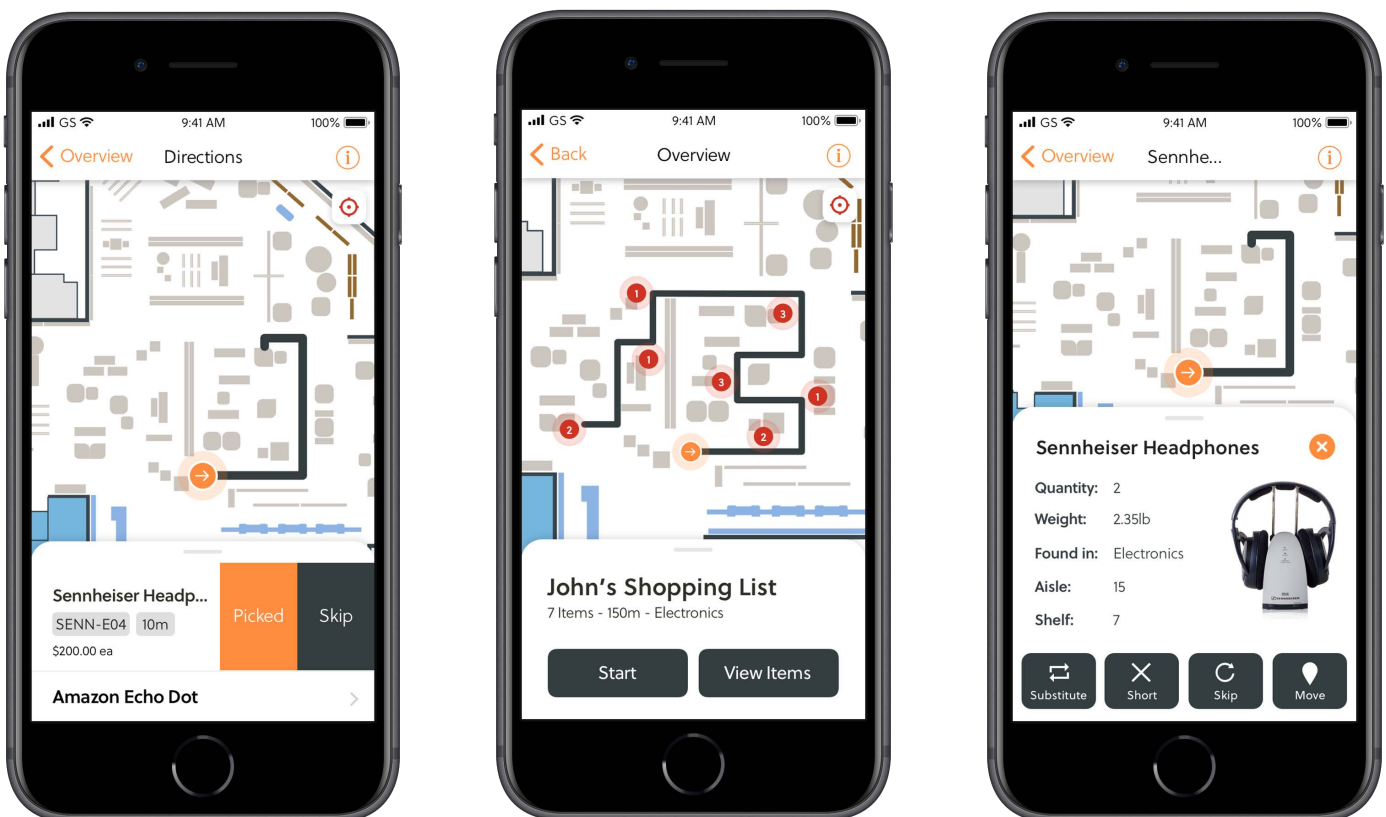
The Solution

A Validated Solution: The Retail Wayfinding solution maps out each store down to an inventory level, enabling employees to efficiently fulfill online orders. The app leverages mapping to visualize the optimal route through the store. In the case of grocers, it even accounts for aspects like freezer and fridge items so they don't defrost if picked first.

Measurable Optimization: Leveraging an optimized routing plan like Mappedin's produced shorter distance runs across the board. The app helped produce a 13% reduction in distance travelled. This translates to a 7 minute reduction per run, an overall 15% increase in picking efficiency.
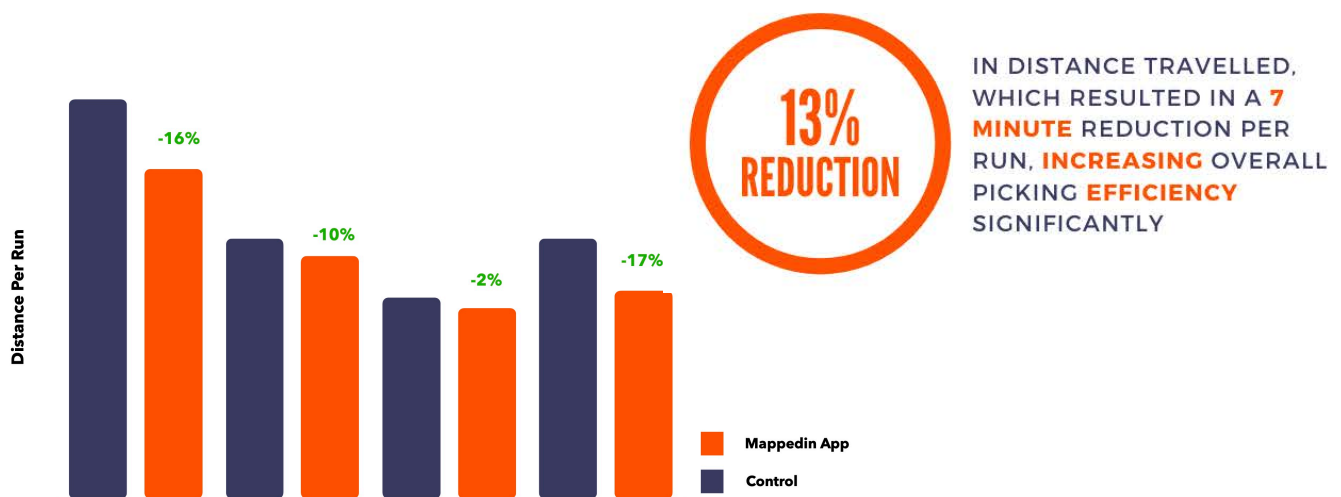
Future Product Features: This project with Loblaw helped validate the benefit of mapping technology within picking and packing environments while also exposing areas of improvement for the product. Being able to pinpoint these areas provided Mappedin with further use case parameters as well as valuable insight from Loblaw employees for future improvements.

Looking Forward

Retailers like Loblaw Digital are paving the way by constantly trying new things and collaborating with other companies to innovate and test all potential options for creating a more efficient workflow. We look forward to testing more mapping use cases with them and other companies in the future.

Mappedin continues to work on expanding our products to new industries, compiling data through proof-of-concepts, and creating products that address core needs in the market. Interested in exploring a pilot project with Mappedin? Retail experiences are undergoing a digital transformation to remain competitive, customized, and convenient. Learn more about our retail offering **here**, or reach out to us at **contact@mappedin.com**.