

## Wholesale Food Distribution: Solving the Last Mile Problem in Perishables



### USE CASE EXPLANATION

Companies like Amazon.com and Walmart's Jet.com are changing the face of delivery by assigning customer-facing roles to logistics departments. As this model becomes the expectation among consumers, Chief Operating Officers (COO) and Operations Managers at wholesale food distributors are taking on more responsibility to provide efficiency and customer service, and the easiest way of tackling these new obligations is by using technology.

### AN EVOLVING INDUSTRY

For too long logistics, supply chain management, and operations have been viewed as cost centers. Unfortunately, this is still the case for many small-to-mid size food distribution carriers, especially when they look to scale. With Amazon's entry into this operational segment via Amazon Fresh, and their \$13.7B acquisition of Whole Foods in 2017, these same operators are now being forced to slash prices and reduce costs with far fewer resources than large companies (Kilcarr, 2017).

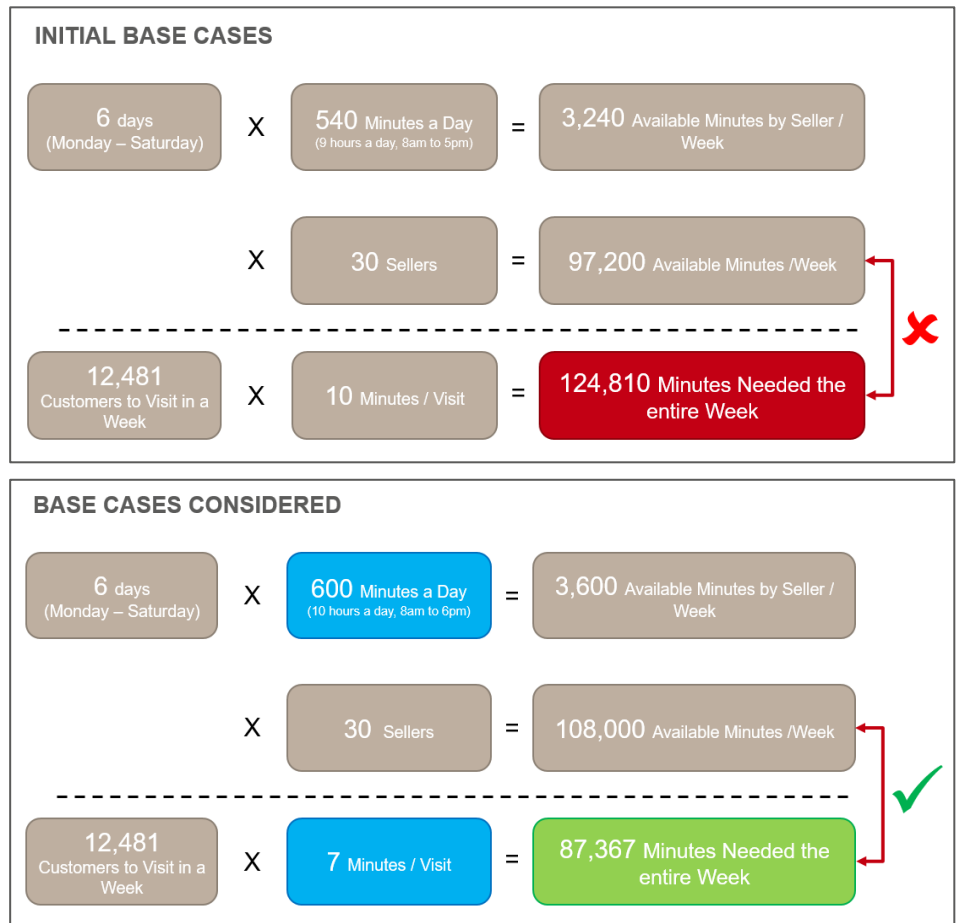
The landscape is not hopeless, however, and technology offers the fastest, easiest, and simplest way to scale when confronted with Amazon's massive scale. For many, the option that allows for customization, optimization, the ability to run simulations before hitting the streets is the right choice. This is precisely what PTV software offers.

### OVEREXTENDED AND SUB-OPTIMIZED

In light of the changes around NAFTA, the PTV team recently helped a food distribution company that was looking to scale by studying their current operations, then running computer-generated simulations to create best-case, worst-case, and most-likely scenarios, with a focus on time-based driver utilization.

### RESULTS

Through these exercises, PTV Group was able to reduce waste, or drive time, per route from 30% of total delivery duration to less than 10%, with a higher quality seven minutes dedicated to each client.



**EASY VISUALIZATION**

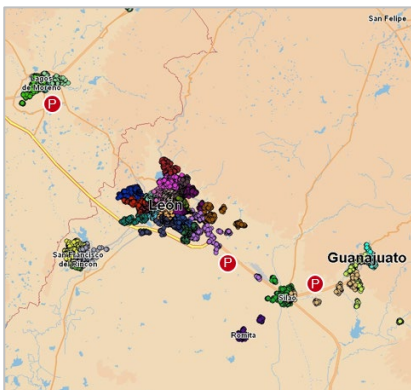
Since the company was unable to purchase more warehouses for inventory storage, per the Amazon model of last-mile delivery, the PTV team turned to controllable variables. That saw a restructure the densest delivery segments increase the driving speed only slightly, enable the manual override function for planners, and to widen the delivery zone.

and shrinkage (Aljohani & Thompson, 2018).

PTV software allows for easy visualization of sellers (denoted by 'P', at left) and consumers (seen as dense clusters).

**KEY CONSIDERATIONS**

When deployed in a live, operational environment, PTV software allowed this wholesale food distribution company to focus on time-based optimization processes, and solve the last-mile delivery issues within a densely populated area, as well as expand its market. As a result, market entry issues were reduced, long-term problems resolved, cost-mitigation strategies implemented, and an ongoing partnership developed.



When taken together, the food distributor was able to optimize 27 out of 30 routes, generate 11.2% more foreign capacity, and 7.4% more local capacity. What's more, research supports optimized operations over increasing the number of storehouses--since more frequent trips actually increase drive time, maintenance costs, carbon dioxide, wasted food product,