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A Case Study:  
Wawa and Penske Logistics  
Build the Fresh Channel



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*The authors are particularly grateful to Robert Moore of Wawa and Chuck Taylor of Penske for their input and support in the development of the case study.*

# A Case Study: Wawa and Penske Logistics Build the Fresh Channel

## INTRODUCTION

A key product attribute of food is “freshness.” Although this basic attribute has the ability to create a significant competitive advantage because of its importance to consumers, many retailers and restaurants continually struggle to improve it. The ability to produce and sell fresh food has many dimensions, but examining a product’s supply chain and finding ways to make it faster and more productive can often lead to improvements in “freshness.”

In 2007, Wawa partnered with Reading, Pa.-based Penske Logistics to introduce a major improvement in replenishing Wawa stores with a few key product categories that demand freshness. The result was the creation of the *Fresh Channel*, which features the daily collection, staging and delivery of fresh-baked donuts, bagels, sandwich rolls, soft pretzels and refrigerated commissary items to every Wawa store. The continued benefits of the *Fresh Channel* include heightened consumer appeal, streamlined store operations, 99 percent on-time delivery and reduced cost of deliveries through consolidation. The continued success of the program is a testament to the business acumen and collaboration skills of Wawa and Penske.

This case study will highlight how the *Fresh Channel* was conceived, what challenges were faced, how the program operates today, and how its key accomplishments have served both companies. Furthermore, this report will detail key success factors by examining the program through “A Day in the Life of a *Fresh Channel* Route Driver.”

## Wawa Company Overview

The first Wawa Food Market opened April 16, 1964, in Folsom, Pa., by Grahame Wood, who saw the business as an opportunity to continue selling his family’s dairy products in the face of a drop in home dairy deliveries. In addition to Wawa Dairy Farms products, the store also sold deli meats and cheeses. Throughout the late 1990s, Wawa continued to expand product offerings and services (such as coffee and 24-hour stores) in order to give customers a quick and convenient one-stop shopping experience. In 1996, Wawa opened its first large prototype store that sold fuel.

Wawa currently operates more than 590 stores, which range in size from 2,500-7,500 sq. ft. and include more than 300 locations selling fuel. Wawa stores offer a wide variety of products, including built-to-order hoagies and sandwiches, prepackaged wraps and salads, bagels, donuts, coffee, tobacco products, bottled drinks and assorted snacks.

Today, Wawa is the 47th largest private company in the country with \$5.89 billion in revenues (2009) and stores in Pennsylvania, New Jersey, Delaware, Maryland and Virginia. In 2009, Wawa employed 16,289.

Wawa's stated core purpose is to simplify the lives of its customers, which the company achieves through its core values, including:

- Valuing People
- Delighting Customers
- Embracing Change
- Doing the Right Thing
- Doing Things Right
- Having a Passion for Winning

Wawa is also committed to improving the communities where they operate at both corporate and regional efforts through fundraising, charities and grants.<sup>1</sup>

The Wawa supply chain organization is based at the company headquarters in Wawa, Pa., and is led by Jim Bluebello (Senior Vice President, Supply Chain) and Jim Crawford (Director of Supply Chain). Major functions in Bluebello's organization include strategic sourcing, fuel retail and sourcing, distribution, and forecasting/replenishment. The Fresh Channel Operations Manager is Robert Moore, who is based in Swedesboro, N.J.

## Industry Overview

According to the National Association of Convenience Stores (NACS), the U.S. convenience store industry totals more than \$624 billion in sales in more than 146,000 stores. Convenience stores serve as a way for customers to purchase food, beverages and, sometimes, gas quickly and easily. Major national convenience store chains include 7-Eleven, The Pantry and Speedway SuperAmerica.<sup>2</sup> NACS also identifies several challenges currently facing the convenience store industry, including high credit card fees, trends in providing fresh and prepackaged foods, and enforcement of restrictions on tobacco products.<sup>3</sup>

## Penske Logistics Company Overview

Penske Logistics is a subsidiary of Penske Truck Leasing. It has operations in North America, South America, Europe and Asia; employs over 9,000 employees; and grossed \$2.4 billion in revenue in 2010. Penske Logistics specializes in inbound supply chain management, cross-docking, sequencing, dedicated contract carriage, distribution center management, transportation management, lead logistics and just-in-time support.

Penske leverages its expertise in these fields through partnerships with major companies to build cost-effective solutions for the improvement of supply chain operations. In addition to Wawa, current major accounts include Whirlpool, Ford, Merck, Cardinal Health, PPG, Samsung, Sony and General Motors.<sup>4</sup>

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<sup>1</sup> <http://www.wawa.com>

<sup>2</sup> [http://www.csnews.com/article-top\\_100\\_convenience\\_stores-953.html](http://www.csnews.com/article-top_100_convenience_stores-953.html)

<sup>3</sup> <http://www.nacsonline.com/NACS/News/FactSheets/IndustryIssues/Pages/default.aspx>

<sup>4</sup> "Penske Logistics". *Who's Who in Logistics and Supply Chain Management – The Americas*. 18th ed. Armstrong & Associates. Stoughton, WI. 2010.

## FRESH CHANNEL BACKGROUND

Wawa and Penske's relationship began in 1998 when Penske began transporting donuts for Wawa. At that time, Penske used a fleet of box trucks to service each Wawa store.

In 2007, Wawa began looking at possible vendors to support a new initiative called *Fresh Channel*. The *Fresh Channel* distribution network was intended to streamline the shipments of fresh food and commissary products that were going to each of Wawa's stores. At the time, several different vendors had trucks going in to the stores at different times to drop off products. Penske was ultimately chosen as a partner through a Request for Proposal (RFP) process that considered multiple companies.

Wawa's decision to partner with Penske necessitated changes on the part of Penske's trucks. While box trucks had worked previously for doughnut deliveries, the new routes required the use of tractor-trailers. This presented a challenge for Penske, as its current team of drivers did not have the commercial driver's licenses (CDLs) required to operate tractor-trailers.

Penske had a decision to make: hire an entirely new group of truck drivers and lose the knowledge base and customer service experience of the current drivers or invest the money to train the existing drivers. In a move contrary to industry norms, Penske Logistics decided to spend the money to train its existing drivers.

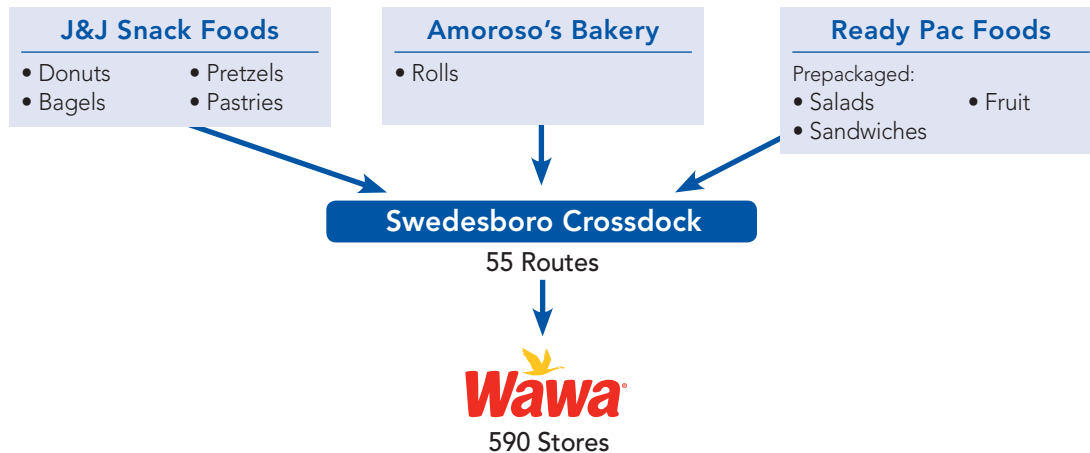
To accomplish this safely, Penske took full advantage of its existing relationship with Smith System, a leader in professional driver training. The training was delivered in multiple formats, including classroom, demonstration, hands-on and online. To ensure the key elements of this training are solidified, seasonal customized "refreshers" are provided annually for each driver. Through this initiative, Penske was able to meet Wawa's needs in terms of transportation logistics while still maintaining the high quality of customer service that its drivers already provided.

Today, the products distributed via the *Fresh Channel* impact about 40 percent of store sales, consisting of about 5 percent in discrete item sales (i.e., donuts, pretzels, prepackaged salads and sandwiches), and about 35 percent in the sales of bagels, rolls, flatbreads, etc., that are used to create built-to-order sandwiches and Wawa's signature hoagies.

## HOW THE FRESH CHANNEL OPERATES

The central base of operations for the *Fresh Channel* is located in a Swedesboro, N.J., warehouse, which acts as a cross dock for products from various sources, such as J&J Bakery and Amoroso's Bakeries.

Before arrival at the cross dock, truck drivers stop at Ready Pac Swedesboro to pick up the Wawa-branded prepackaged refrigerated foods. The cross dock facility is adjacent to J&J Bakery and connected to the bakery by a conveyor system. The workforce at the Swedesboro cross dock is made up of 20 J&J employees, whose labor is charged directly to Wawa. On a daily basis, Penske's local drivers are dispatched to Amoroso's Bakery to pick up the fresh-baked rolls as they come off the production line and return them to the cross dock.



After the baked goods are collected in the warehouse, the orders are organized by store into the trucks. Each truck then makes an early morning run to the stores and is finished by early morning. The truck drivers are responsible for checking the inventory of their trucks before they leave and then distributing a shipment to each store along their route. At the store, the drivers unload the shipment and bring the product into the store, separating the different parts of the order to their respective areas. Particularly important is that the refrigerated items are taken directly to the store refrigeration units. It is also the drivers' responsibility to put together the doughnut display according to certain schematics – also known as “facing” the donuts.

## Order Cycle

Before deliveries can happen, a number of steps must first be taken throughout the distribution network. A typical schedule – also known as the “36-hour order cycle” – is shown below. This example is for product that is intended for Wednesday store sales.

Sunday	Monday	Tuesday	Wednesday
Wawa Forecasting & Replenishment team forecasts orders.	Local Wawa stores have until the end of the day to adjust orders.	Forecast quantities are sent to vendors for production, and products are staged for shipment.	Shipments run from 2:30 p.m. Tuesday until 5 a.m. Wednesday for store sale.

## Technology

The *Fresh Channel* operation takes advantage of today's latest supply chain technology in several ways. Order information flows to Penske via EDI and is assembled by route and used to generate the store-specific manifest. The information also is sent to Penske's in-house logistics management system by route and store.

Penske also utilizes proprietary software known as CellCom to load the route information onto a mobile device that is then updated by the driver during the route to provide real-time feedback and GPS tracking. The cellular device also is equipped with a Performance Tracker application, which connects to the truck driver's engine control module to monitor various on-road events, such as MPG performance, hard braking, idle time and speed bands. It also generates an electronic driver log to meet Department of Transportation regulations. Penske also uses this technology to help promote safer and optimized truck driving, which has the added benefit of reducing the carbon footprint of its truck drivers by monitoring their on-road performance relative to the miles per gallon of fuel consumed.

Further, Penske's refrigerated trailers are equipped with an advanced temperature monitoring system that provides web-based reports and alerts to dispatch of any change in each of the temperature zones, so food safety and product integrity is measured and maintained at the highest quality standards.

## Operating Challenges

With the daily Penske deliveries, snowstorms can be a particularly tricky problem in the winter. If the drivers cannot complete their morning deliveries, the store will be left without any fresh product for the entire day, which will not only result in lost store sales, but can also hurt customer loyalty. To combat this problem, Wawa and Penske have to pay special attention to changing weather conditions to ensure their drivers can make it safely to the stores. Timing is critical.

For example, in the order cycle example illustrated on the previous page, if bad weather is expected for the Tuesday deliveries, a "bake" or "no bake" decision needs to be made late Monday night or early Tuesday morning. The unpredictability of mid-Atlantic weather can make this a tough call. One worst case scenario would be to produce product and then not be able to deliver it, thus causing product write-off exposure.

## A DAY IN THE LIFE OF A FRESH CHANNEL ROUTE DRIVER

This section will follow Penske Logistics truck driver “Joe” through his typical day – from pre-trip activities to his return to the dispatch facility after his run. Joe was one of the original drivers in the Penske/Wawa relationship and was also part of the pool of drivers trained to operate one of the 57 tractor-trailers in the Penske fleet used for *Fresh Channel*.

### Pre-Trip Activities

When Joe arrives at the Penske facility, he verifies his assignment with the on-site supervisor. He is assigned a tractor and trailer, and performs his pre-trip inspection. Joe typically has the same route on a specific day. If, for some reason, he is assigned a different route, he can reference a manual that contains details for every store on his course, including directions, parking and unloading instructions and store contact information. Once Joe has received his assignment and inspected his vehicle, he picks up his CellCom unit and logs in. Joe will use the CellCom unit, a wireless communications system, throughout the route to update a master system with his location and time.

Once he leaves the facility, Joe hooks the tractor to the trailer, updates his time and location through his CellCom unit, and drives the 38-foot dual-temperature-controlled trailer to Ready Pac Swedesboro. The temperature in the trailer is set to 38 degrees Fahrenheit before Joe arrives for his route to ensure that the trailer will be at the proper temperature when he arrives at his pick-up destination.

### Pick-up at Ready Pac Swedesboro

When Joe arrives at the Ready Pac facility, he updates his CellCom unit with the time of his arrival. He backs the trailer into the assigned dock door and again updates his status on the CellCom unit. Joe checks the temperature in the trailer and uses his cell phone to call the Ready Pac dock supervisor.

Once the Ready Pac employees have loaded the trailer, Joe is escorted to the loading door by the dock supervisor to verify the tote count. If the count is correct, a bulkhead is installed to “wall off” the prepackaged sandwiches. When that is in place, Joe turns the temperature to 60 degrees Fahrenheit in the back of the trailer for the rolls and donuts. After Joe verifies the temperature of both compartments, he drives to the J&J warehouse and updates his CellCom unit with his departure time.

### Pick-up at J&J Snack Foods

Once he arrives at the J&J warehouse, Joe again updates his CellCom unit and backs into the assigned door for loading. When he receives the loading documents from dispatch, he verifies the tray count for bread, pretzels, bagels and donuts. Joe then signs the J&J route level document and begins loading these items into the trailer in reverse unloading order for delivery to approximately 11 stores. After the trays are loaded, Joe secures them in the trailer, closes and locks the door, and again updates his CellCom unit with his departure time from the J&J warehouse.

## Store Delivery

When Joe arrives at his first stop, he updates his CellCom unit, verifies the temperatures in the trailer, and notifies the store manager of his arrival. Since the trays of pretzels, bread, bagels and donuts are secured to the inside walls of the trailer, Joe has a center aisle to access the commissary items behind the bulkhead.

Joe enters the cold area of the trailer through the bulkhead door, puts the totes on a dolly, closes the bulkhead door, and makes his way to the store cold box. Once the commissary items are delivered, Joe returns to the trailer to retrieve the bread/donut items. He enters the store through the front/vendor door and delivers the products to the appropriate places in the store. After he is finished with this store delivery, Joe will pick up the empty containers from the previous day's delivery and take them back to the trailer. When the empty containers are secured in the trailer, Joe closes the door, updates his CellCom unit with his departure time, and continues on to deliveries at the remaining 10 stores.

## Return

After Joe has completed his last delivery, he turns the trailer refrigeration unit off and calls Penske Logistics (PL) dispatch to receive approval to return and proceeds back to the J&J warehouse. Once at the warehouse, Joe updates his CellCom unit, unloads all the empty containers and sweeps his trailer to the rear for subsequent waste disposal at the yard. He returns his signed store invoices to PL dispatch, returns to the truck, updates his CellCom and returns to the Penske yard. He performs a post-trip equipment inspection, enters his ending mileage in CellCom, logs off the system and secures the equipment.



## THE WAWA/PENSKE LOGISTICS RELATIONSHIP

Wawa and Penske employees work together in a close partnership to ensure the success of the *Fresh Channel*. In the Swedesboro office, a number of Wawa and Penske employees work side-by-side to make daily decisions and help the operation run smoothly. On a higher level, the relationship is handled by account managers from both Penske's team and Wawa management. These individuals work together to ensure smooth day-to-day operations and to plan future strategies.

Metrics have been put in place to ensure that both Penske and the overall *Fresh Channel* are properly servicing each Wawa store. Penske's performance is measured by on-time delivery, customer service and delivery completion. Wawa measures the overall performance of its *Fresh Channel* through product quality, customer service, on-time delivery, fill rates, order accuracy and labor rates. Metrics are based on observable behavior. For example, Penske is measured on customer service by Wawa employees who interact with drivers. The Wawa employees rate the drivers based on the level of courtesy and store disruption when dropping off shipments.

Penske and Wawa work on a cost-plus contract structure. In this agreement, Wawa pays for all expenses Penske incurs in providing shipments, in addition to a management fee. Through gainsharing, Penske is incented to reduce expenses. A budget is set for the year, and Penske and Wawa share both improvements and overages.

## FRESH CHANNEL BENEFITS

The *Fresh Channel* has provided key benefits to Wawa. A reliable, safe and secure distribution capability has been put in place to allow the replenishment of fresh products to all stores on a daily basis, which improves the customer experience. The consolidation of vendor deliveries has created cost-reducing economies of scale. Furthermore, store operations processes have been simplified. There are fewer deliveries made, and the remaining deliveries can be scheduled on a more opportune basis. Additionally, daily deliveries have allowed certain food production activities (such as salad mixing) to be moved upstream and be performed more efficiently. Because every Wawa store is serviced daily, the *Fresh Channel* can be used for emergency distribution of any kind of product or supply, ensuring that each store is always well-stocked.

## FUTURE PLANS

Wawa and Penske Logistics leaders are continuously working on plans to improve deliveries and reduce cost. The possibility also exists to continue the expansion of the *Fresh Channel* by adding more product categories and vendors.