

Tractor Supply Company: “Voice Distribution is the Right Stuff”

Founded in 1938 as a mail-order tractor parts business, Tractor Supply Company (TSC) has become a national retail phenomenon. Today, TSC operates 445 stores across 30 states, serving the needs of farmers, ranchers and others who have chosen the rural life. Posting annual sales of \$1.2 billion, TSC is the largest retail chain of its kind in the United States. Among its strategies for staying that way: Making sure it has “the right stuff at the right place at the right time.” Helping TSC handle that chore: voice-directed distribution software and hardware from the world’s leader, Vocollect.

The Challenge:

Support and Drive Growth

Growth! It’s the “challenge” most businesses would love to have, especially if it hits the double-digit mark.

But it’s business as usual for Tractor Supply Company, which is again expecting sales to increase 16 percent or more this year. TSC’s impressive growth is a tribute to its unrivaled ability to provide a selection of merchandise that’s “just right” for its niche market: farm and ranch equipment, livestock and pet supplies, tools, hardware, work clothes and other necessities.

Growth is also a powerful driver for change. Last year, TSC added more than 110 stores to its roster — 1/3 again its previous number. That, in turn, put significant new demands on its distribution system to keep those additional stores well-stocked.

TSC handles distribution for all of its stores throughout the Northeast and Southeast from four DCs. One, a 500,000 sq. ft. facility in Pendleton, Indiana, serves 240 stores — nearly half the TSC universe.



The Pendleton facility stocks 8,000 SKUs and runs three shifts of order selectors, working 24 hours a day, up to seven days a week during the busy spring / summer season. What’s more, it picks as many as 60,000 “lines” every day, which translates into hundreds of thousands of items.

Until January 2002, every pick was handled by a paper system and entered into the warehouse management system (WMS) manually. According to Larry Dillender, General Manager, the system worked surprisingly well; however, it would not accommodate TSC’s aggressive retail expansion.

“Working ‘hands-free, eyes-free™’ has enabled us to increase productivity over our previous paper-based system – and over RF handheld units as well.”

Larry Dillender
General Manager
Tractor Supply Company

Voice Results

Objectives

- Increase productivity
- Improve accuracy

Application

- Order selection: gravity-flow and case-picking areas

Installation

- SAP® R/3® ERP and Warehouse Management Module
- 66 Vocollect Talkman® T2 computers
- Cisco 802.11b RF system

Results

- Productivity up 18% in gravity-flow area
- Productivity up 8-10% overall
- 99.5% accuracy

ROI

- Payback in less than 9 months

Future Improvements

- Entire distribution network – 4 facilities – picking by voice

“Our voice installation with Vocollect is, by far, the simplest and most pleasant third-party experience I can remember. Great product, great team, great company.”

Larry Dillender

General Manager
Tractor Supply Company

The Solution:

A Whole, New System With Growth in Mind

With growth in mind, Tractor Supply launched a comprehensive IT expansion. Starting with an upgrade to its SAP® R/3® (4.6C)-based infrastructure, it also expanded use of SAP’s Warehouse Management Module to enhance the flow of product throughout the Pendleton DC.

Realizing the need to automate warehousing operations, TSC also installed a radio frequency (RF) system to allow information to be transmitted across the warehouse.

After evaluating both voice and barcode devices to automate its picking operation, which was identified as the most critical process in its daily workload, TSC selected voice because the technology is faster. In fact, the project team justified the implementation solely on the productivity boost resulting from the “hands-free, eyes-free™” operation that voice enables.

TSC’s choice was the Talkman® solution by Vocollect, which combines the industry standard for voice applications — the T2 computer — with the world’s leading software. Vocollect brought market leadership, demonstrated expertise and outstanding service and support.

The initial plan was to install voice only in the gravity-flow area, which comprises approximately 65 percent of picking operations at Pendleton. However, a site visit to a Vocollect customer in the grocery business demonstrated how well voice works for case picking, so the entire facility was quickly scheduled to “go voice.”

Another choice for TSC was developing an interface with its SAP system, to and from the Talkman system. While the Talkman system has the capability to talk directly to a WMS, the interface TSC implemented extracts data directly from Vocollect’s server database using iDOCS to provide nearly real-time updates to the SAP WM module.

The Result:

Productivity Gains & More

The voice-directed system is clearly the right way for TSC to grow its technology — and its business.

Among the notable successes: the interface between SAP’s Warehouse Module and the Talkman system. The SAP system initiates data pulls every two minutes, capturing the latest activity on the floor and ensuring full, accurate and timely information. Visibility has been the key to a long list of operational improvements, such as more efficient replenishment.

TSC’s project team reports that the voice installation was notably quick and easy. Training time was minimal: 2-4 hours in each functional area, for a total of 8-12 hours to transition the entire crew of 60+ order selectors to voice-directed picking.

More important, working hands-free, eyes-free makes order selectors faster and more accurate. As a result, productivity is up 8-10 percent throughout the facility, and up 18 percent in the gravity-flow areas, where the heaviest volume of picking occurs. Both of these statistics translate into several thousand additional lines per day, without additional labor costs.

Voice has provided savings in the data entry function as well. At one time, it took six people to key data from a deluge of paper into the WMS. Now data entry is completed on-the-spot by floor personnel — by simply speaking. Voice entry also avoids the errors that creep into manual processes, plus the re-work.

After just six months, Larry Dillender estimated Pendleton was nearing payback on its Vocollect system. No wonder voice is being installed at three other TSC facilities; next stop: the brand-new DC in Waco, Texas. 🚩



www.vocollect.com

Vocollect North America:
info@vocollect.com

Vocollect Europe:
voc_emea@vocollect.com

Vocollect. Voice-Directed Distribution.

Since pioneering voice recognition for industry in 1987, Vocollect has set the standard for warehouses and other business settings. Together, its market-leading Talkman® wearable mobile computer and integrated software suite cut operating costs by eliminating errors and improving worker productivity shift after shift.

Leading WMS providers, material handling integrators and specialty voice solution providers around the world choose the performance and reliability of Vocollect to deliver integrated voice-directed distribution solutions. And every day, over 60,000 workers around the globe rely on Vocollect’s integrated voice solution to help improve their operations.