

Vocollect by Honeywell Case Study

Fox Racing

Voice Results

Objectives

- Improve productivity
- Increase order accuracy
- Streamline hardware costs
- Support a burgeoning internet business
- Keep pace with changing customer requirements
- Manage rapid growth

Technology Goals

- Transition as much as possible from paper and handhelds
- Accelerate productivity with voice across multiple workflows

Applications

- Batch-picking (cart and envelope)
- Replenishment
- Slotting
- Cycle-counting
- Receiving (European facility)

Installation

- Vocollect T5 Talkman and A500 Talkman devices
- SR-20 and SRX headsets
- WMS: High Jump
- Integration partner: Vitech Business Group

Results

- 50% productivity improvement in picking
- Minimum 15% improvement in additional workflows
- Accuracy improved from 82% to 99.99%
- Training time reduced from one day to 1.5 hours
- Number of order selectors reduced from 35 to 18; number of dedicated cycle-counters reduced from 4 to 1
- Moved from putting away 25-27 lines per hour with handhelds to 35 with voice
- Interleaving picking with cycle-counting; increased daily productivity by 35%
- Greatly improved worker satisfaction

ROI

- Six months (six months earlier than plan)

Future Plans

- Voice for U.S. receiving function
- Move by item
- Quality control functions
- Voice for packing stations

Fox Racing Races to Success with Vocollect Voice®

The Fox brand is the most recognized and best-selling brand of motocross apparel in the world today. Headquartered in Morgan Hill, California, with additional offices in Irvine, California and Newcastle, United Kingdom, Fox Racing built its business by developing clothing for the high-intensity, physically demanding motorsport of motocross. Since its founding three decades ago, Fox Racing has become an international leader in the youth lifestyle clothing market, with its famous Fox Head logo seen worldwide. In recent years the company has expanded into surfing, wakeboarding and mountain biking apparel, and has grown to support a significant internet business (almost half of total revenue) as well as having a retail presence in department stores like Nordstrom and Macys.

The Challenge

Support Company Growth and Expansion through Accelerating Distribution Center Performance

With the addition of new product lines and rapid volume growth, Fox's business had reached the point where additional growth could not be supported with its current systems. Fox had been using paper and labels in its picking operation and handhelds for put-away and replenishment. The company found that RF technology had a number of moving parts and the reliability suffered. In addition, the paper-based picking system sub-optimized both productivity and accuracy.

With excellent integration support from Vitech Business Group, Fox began implementing voice for picking in its two California distribution centers in Morgan Hill and Gilroy in 2008. (The company has since moved voice to its operations in Newcastle, United Kingdom and Calgary, Alberta, Canada.) Its goal was to integrate a technology change that would work well in conjunction with its warehouse management system (WMS). At Vitech's recommendation, the company selected Vocollect Voice for its flexibility, adaptability and proven ability to improve productivity and accuracy.

For picking, Fox investigated a variety of technologies. It found handheld computers couldn't deliver the desired productivity gains and pick-to-light couldn't deliver the flexibility or accuracy. Picking a size-15 boot with an RF gun was hard; a hands-free operation was needed to

"We had reached the point where we would be forced to turn business away if something didn't change, and change quickly. We simply didn't have the bandwidth to keep pace with our rapid growth, both internationally and with our burgeoning internet and retail businesses. Vocollect Voice has helped us meet and exceed every performance goal we have set, and we've accelerated our productivity significantly by using voice with multiple workflows in our DC operations. Voice has literally changed the face of distribution at Fox Racing."

Robby Dhesi,
Vice President of
Operations
Fox Head Inc.



give the worker greater freedom of operation. Deciding on a voice solution, Fox investigated a variety of voice providers, and found only Vocollect could deliver the proven business stability and results for the long haul. After setting up a test comparing voice to paper on picking to totes and cart-picking that took less than one hour, senior management was sold on Vocollect Voice. Picking accuracy increased to a level such that there were only 13 errors in all of 2010.

With a tremendous and rapid improvement in productivity and accuracy in picking through voice, Vice President of Operations Robby Dhesi immediately saw a goldmine – why not further leverage his investment in the voice system and see how it could affect productivity across other workflows such as cycle-counting, replenishment and put-away?

“If we could generate as much as a 15 percent improvement in productivity in additional tasks beyond picking, we could see the way clear to keep expanding our market reach around the world,” says Dhesi. “Further, if we could transition as much as possible from handhelds strictly to voice, we believed it would generate additional improvements and improve worker satisfaction even more so,” he said.

The Results

Operational excellence, business goals achieved

With excellent integration support from Vitech, Fox embarked on a journey toward operational excellence that has become a true distribution world success story. Today Fox uses Vocollect Voice to support picking, replenishment, cycle-counting, slotting, receiving, and packing. With the demands of processing items in more than 35,000 SKUs across multiple channels of operation, voice has proven a catalyst for company growth, helping Fox to address a wide variety of challenges to the business:

Problem: *Keeping pace with a highly fluctuating order volume*

“No matter how good we got at picking with voice, we found that our pickers were waiting too often for the next order/cart to get to their station. That was lost time we couldn’t get back,” says Dhesi.

Solution: *Voice supports interleaving of tasks*

Prior to implementing voice, cycle-counting at Fox was performed as a full-time function using handhelds every three months, with only 60 percent accuracy. Part of this was because the workers could become fatigued from counting items full-time. Now, as much as 90 percent of the cycle-count is performed using voice, and nearly half of this is performed in-line with picking.

Interleaving cycle-counting with voice has netted a 90 percent improvement. Fox’s auditors require the company to have inventory audited every 90 days. Interleaving voice-picking with voice-cycle-counting helps to pick up 30-35 percent of the cycle-counts during each 90-day period.

With the in-line method, Fox’s WMS calculates when to turn cycle-counts on and off, based on order volume. The goal is to eliminate worker idle time. When picking personnel are standing idle awaiting an order, a 90-day scheduled cycle-count is triggered. The pickers read the aisle where they are currently standing, and they are directed to cycle-count any location that has not been counted in 90 days. Fox now performs less than 10 percent of scheduled cycle counts in the normal 90-day cycle, because most locations have already been counted. By interleaving replenishment and cycle-counting, Fox has seen a 20-25 percent increase in productivity.

For replenishment, Fox has a dynamic slotting function embedded into the voice system. Workers put items into bins three to four times a day, because while Fox has 35,000 total SKUs, it only has forward pick faces for 11,000 SKUs.

Dynamic slotting allows Fox to shorten the travel path for picking and replenishment. If a worker goes to pick a bin and it is empty, or he has run out of pick bins within a given class (such as hats, a class of products the company likes to keep together), voice directs him to a dynamic aisle where he can say where he is, and the WMS will pick a dynamic slot for the product. The user just says, “I am in Alpha One” – there is no need to say the complete location.

The result of this interleaved replenishment process was a 20-25 percent increase in productivity, as Fox increased the rate from 25-27 lines per hour using RF to over 35 lines per hour with voice.

Problem: *Difficulty in planning distribution staffing because of fluctuating volumes*

Fox tries to operate as lean as possible, utilizing an overstock building located 15 miles away from the main distribution center. However, ‘just in time’ doesn’t always happen perfectly.

Solution: *Optimize labor pool through continual switching of tasks performed through voice*

Fox bases labor decisions on workflow reports from the High Jump WMS on the number of orders coming in. Six people currently perform the put-away to replenishment task, and sometimes they are switched between replenishment and picking. This provides the flexibility to have a few people come off replenishment/put-away and go to picking, to drop to one person in replenishment for half an hour so the rest of the staff can go pick a cart each.

“With voice, it is easier to make changes faster than it is with handheld devices,” Dhesi says. “In general with voice, normally it is very easy to test if you don’t do a sophisticated process. You can get a new process into production and conduct training within hours or even minutes – including the process changes.”

Problem: *RF equipment replacements a recurring cost*

“RF scanning has a lot of moving parts. We have used every handheld vendor out there, and there are always problems,” says Dhesi. “Having a computer, a scanner, a monitor... those are all hardware pieces that can fail. No matter what system we had, every three years I was replacing computers at work stations. Transitioning to voice has been cost-effective on many fronts.”

Solution: *Durability and performance of voice equipment*

“No matter what technology you use, you will be hardware-challenged at some point, so we do still use voice and handhelds both with put-away/replenishment to have the flexibility. Dhesi continues, “In addition, the hands-free/eyes-free functionality of voice fits well with Fox facilities. The workers are opening a case and dropping the contents into the pick bins, so having both hands free saves time and improves safety. With having to pick up a handheld gun from the holster, scan the item, pick up the gun, grab the case – there are just too many touches. Voice helps us bypass all of that.”

“It’s more of a cost issue than a business continuity issue,” says Dhesi. “In every distribution operations environment you have fixed expenses, computer supplies and the like, so budgeting for new hardware every year doesn’t fly too well with a CFO. We are always challenged to build now for future volume, and we shouldn’t have to add hardware so quickly.”

“We find voice devices are more stable than handhelds; I don’t plan on replacing our Vocollect Talkman mobile computers for about five more years.”

Problem: *Addressing geographic and cultural differences in the ordering process*

In North America, people order the product first and then tell a company whether they want it or not. In Europe, customers commit to items way ahead of production.

Solution: *Integrate voice for receiving in European operation*

Fox integrated voice into receiving within its European operation, which has a 22,000 square foot distribution center. Fully 90 percent of the volume in Europe is from orders that come in

before the purchase order has been placed for the order. Using voice for receiving helps Fox pre-book multiple orders and schedule the necessary picking and receiving.

Problem: *Long worker training times and “pilot error”*

Fox found that the many function buttons on handhelds were confusing to the users and actually increased overall training time. The company needed a quality process that would be easy to train and simple to use. With handhelds, training time was approximately 12 hours.

Solution: *Voice helps management train workers quickly, coach workers for peak performance*

With voice, training time has been reduced to only two hours. “We instituted voice because of its ability to help us improve our overall quality as a distribution operation, not just to achieve our productivity and quality goals,” continues Dhesi. The voice system also allows us to turn on logging when there are issues – we can run logging anywhere from eight hours to a week to ensure the issue is fully documented. “With handhelds, you can turn on logging, but typically you get locked in a process – sort of like getting wrapped around a telephone pole! That person is down until we figure out what the problem was...and then there are database consequences, such as having to adjust items processed incorrectly.”

Summary

Concludes Dhesi, “Overall, I am quite satisfied with the way we have been able to rapidly identify and integrate new ways of using voice across multiple workflows. We would be happy with the results we have attained just from using voice with picking, but the value-add we have found in applying voice for many other workflows and the ability to interleave tasks have made our overall performance skyrocket and keep pace with the growing demands of a successful business.”

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About Vocollect by Honeywell

Vocollect by Honeywell is the leading provider of innovative voice technology solutions that help companies with mobile workers run a better business. Together with a global team of over 2,000 Vocollect Certified Professionals, Vocollect enables companies to save more than \$20 billion annually through further optimization of operations, improving business decision capabilities, and delivering the industry’s premier worker experience in challenging industrial environments to nearly one million mobile workers who move in excess of \$5 billion of products every day.

Vocollect integrates with all major WMS and ERP systems and supports the industry’s leading handheld computing devices. Visit us at www.vocollectvoice.com.