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Supply Chain Digest Tech Note:

New Voice Headset from Vocollect Sets New Standard for the Market

Voice technology in distribution has seen incredible growth over the past decade, moving from a somewhat niche solution used primarily in the grocery and food service sectors to a mainstream technology that has found a place in virtually every industry segment.

Greatly summarizing, voice uses audio to deliver instructions to a worker in a distribution center or other environment, and processes audio responses from those workers as they complete a task. With a voice terminal typically worn on a belt, and a headset for receiving the instructions and confirming the tasks (or asking the system a question), operators have both hands free, which can greatly improve productivity versus carrying a portable wireless (RF) terminal (RF remains the largest competition for voice). Voice also can be said to be "eyes-free" as well, since workers do not have to look down at a terminal screen to receive instructions.

The primary deployment area by far to date has been in piece and case order picking applications, but of late voice has started to be used by many companies in other areas, such as replenishment, receiving, QA audit, and truck loading.

The technology development focus from voice providers has generally been on the voice software that translates tasks generated say from a Warehouse Management System into audio instructions, processes voice responses from workers, performs in some cases the logic to generate the work tasks, integrates with a WMS or order management system, etc.

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Great progress has been made in these areas, such that the issues that characterized some of the early voice implements (difficulty "training" the system for individual voices, sometimes slow system response) have gone almost entirely away. While not common even a decade ago, the occasional voice deployment failures in the early years are virtually unheard of today.

Progress has also continued on voice terminals themselves, whether of the more dedicated variety, or the general progress in wireless terminal technology that offers voice-enablement as well.

With that backdrop, we were very impressed with a new product introduced by voice provider Vocollect (an Intermec company) which has smartly redesigned the headset that accompanies its voice terminals, taking an essential but often overlooked accessory item and applying some really smart engineering to take the category in a whole new direction.

Vocollect's SRX2 Headset

To date, voice providers have typically sourced headsets from third parties, and frankly (and perhaps understandably) the headset was never given all that much attention in the selection cycle by users, in part because they were largely the same across vendors. That even as the headset is in fact the way a worker firsts interacts with the system and which remains the primary way a user experiences the system over time.

What is noteworthy about the new SRX2 – and really the reason for this Tech Note – is simply that for an accessory most companies might take for granted, Vocollect has clearly applied a significant amount of smart design engineering to this product from literally top to bottom, in a product area that in retrospect now seems to have been an obvious candidate for such a makeover.

There are improvements to like a lot from both a user and management perspective.

Vocollect SRX2

From our view, a user would primarily be concerned with three areas of performance from a headset: (1) comfort; (2) quality of the sound being delivered; and (3) that the system would easily recognize his or her responses without needed to repeat them, or having the system thinking a response was given when it was not.

The Vocollect SRX2 has nicely addressed all three of these areas:

- The headset is very light and comfortable, and can be adjusted in virtually every direction across the band itself and the ear pieces. We tried it on ourselves here at SCDigest with a unit sent by us by Vocollect, and found it very easy to wear and adjust. You can also move the "mic boom" to enable either left or right ear configurations, depending on your preference.

- The new earphone has a much higher level of audio "fidelity" than previous headsets, and just as with consumer electronics, the higher fidelity improves the audio quality. Words will sound clearer to workers. This is important not only generally, but especially so when listening to part or location number strings that need to be precisely understood.

- New "SoundSense" technology released in the SRX2 combined with an improved multi-array microphone should provide significant improvements in voice recognition. The new mic itself will provide cleaner audio to the system, and the SoundSense technology was built to do a better job of filtering out the many extraneous noises that can consistently be heard in a distribution center environment (horns beeping, pallets dropping, conveyors turning, etc.). Those outside noises can sometimes actually cause the system to think a voice response has been given when it has not. Vocollect says its testing shows a 50% reduction in such "insertions."
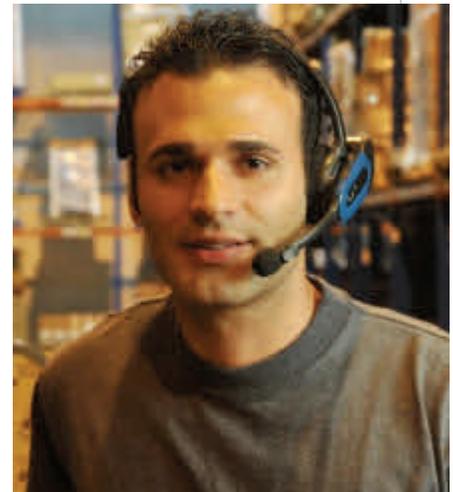
Company management, on the other hand, while certainly interested in worker comfort and satis-faction, also has concerns with total cost of ownership and management of the units.

The reality is many if not most companies running multiple shifts today share voice terminals across those shifts, but do not share the headsets for personally hygiene reasons. Vocollect has smartly decoupled the microphone and control piece from the headband, so that workers can keep a personal headband and the microphone piece can be shared across users. The microphone itself has a removable windshield that can also be kept personally for hygiene reasons.

And nicely (just another example of the smart design here) that mic cap is designed to fit right into the headband for storage when not being used, so a worker can keep his or her personal headband and mic cap together when on break or after a shift.

This will enable companies to purchase fewer microphones up front, and keep fewer spare full headsets, with the increased flexibility to separate head bands and microphone units.

The SRX2 also makes overall management of the headsets easier, first through a USB port for software updates when needed, and through a new computer tool associated with battery charging that visually informs the man-ager that a battery is not charging and may need to be replaced.

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Other noteworthy features of the SRX2 include:

- Improved wireless connectivity between the headset and the terminal through a Vocollect-enhanced Bluetooth connection. Among other benefits, Vocollect says it will eliminate the "crossover" that can sometimes happen when multiple voice users are in the same physical area between different terminals and headsets.

- Improved battery performance. Vocollect says a single charge will last for 20 hours in a normal environment, and 10 hours in a freezer, and that the SRX2 is the first wireless headset certified and designed for freezer environment.

The system is also backwards compatible with most existing Vocollect terminals in the field, open-ing up the opportunity to upgrade existing systems. On a go-forward basis, the SRX2 will be the one primary headset marketed by Vocollect, versus a number of different headset in the past car-ried to meet different application needs.

The SRX2 is now generally available through Vocollect directly and its channel partners.

The Bottom Line: Vocollect has simply done an excellent job of smartly re-designing an important component of a voice system that the market had sort of taken for granted and put in almost com-modity status.

Vocollect has shown that is far from the case, achieving an impressive number of improvements that will benefit both users and companies. Field reports at this stage are still limited, but on paper and from inspection of an actual unit, the SRX2 for now sets a new standard in the market.