

# What's New in Technology 2008

A supplement of:  
**SMALL** Business Times

Reprinted from  
July 25, 2008

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## Lean, mean, and green

*Guardian Business Solutions' ShopTalk™ shop floor information system cuts rework and reduces lead times*

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hen Horicon-based Gardner Manufacturing Co. was looking to replace an aging labor collection system, the manufacturer of custom sheet metal wanted a system that would support its ISO 9001 initiative while improving communication to and from the shop floor.

Gardner decided on ShopTalk, a shop floor information system from Guardian Business Solutions that is designed to cut lead times, reduce errors and make businesses more competitive. After training 100 employees on the computer touch screen system, labor reporting errors at the 75-year-old firm were reduced on the first day.

ShopTalk is a touch screen computer mounted on a mobile cart, so it serves as a moveable information kiosk and data collection system. Workers can access all of the information they need and



bring up pictures and CAD drawings. They can enter labor, such as how many pieces they worked on as well as providing other data for meeting lean manufacturing initiatives.

"Out on the shop floor, it is easy to use and gives our supervisor information firsthand, so locating and moving orders through our shop has increased our efficiencies and throughput," says Gardner plant manager Terry Beske. "We are able to take on short lead times and work them into our schedule to meet our customer schedules."

Manufacturing companies have a paper shop packet that goes

out to the workers and tells them how to build a product. ShopTalk does that electronically, eliminating the need for shop packets. That comes in handy when a customer needs to make a change, as the system updates the current information and eliminates the need to update the shop packet, says Bob Lazlo, director of sales and marketing for Guardian Business Solutions in Brookfield.

The feedback feature has allowed shop workers to communicate faster with engineering and other departments, meaning that corrective actions can take place immediately, thereby saving time and possible rework costs.

### ShopTalk and ShopTalk Mobile promote lean manufacturing

ShopTalk and ShopTalk Mobile, an integrated warehouse management information system, both utilize leading-edge technology to help manufacturers and distributors become more lean by reducing errors and becoming more efficient.

"What shop floor managers really want is to make their workers more efficient and reduce waste," Lazlo says. "The goal is to eliminate the non-value-added activity. The ShopTalk system helps to report that."

By providing the worker with correct information that is up-to-date on the computer screen, it helps eliminate mistakes and reduce scrap, Lazlo adds.

Designed specifically for the shop floor worker, ShopTalk allows workers to easily access real-time information and work instructions by using touchscreen or voice recognition which is ideal for workers who perform mobile tasks and need information at their fingertips while keeping their hands free.

Guardian's customers are using ShopTalk to record their labor

data. The system records the start time and end time, how many pieces are produced and how much scrap was generated.

"They know how long the worker has worked on that order, they know where it is in the system, and they know how far along that shop order is," Lazlo says. "We can measure how long that shop order was in that work center and how long he worked on it."

What manufacturers are trying to do is shorten the lead times and maximize the value-added time, and reduce the non-value added steps that the customer is not willing to pay for, Lazlo adds.

"If it's sitting around and not going out the door, then they are not getting paid for it," Lazlo says. "To be competitive with China and other countries, you have to be more efficient and do it with less mistakes, and our technology helps you to do that."

## ShopTalk Mobile increases productivity

ShopTalk Mobile enables companies that have employees on the move to increase productivity, decrease errors, and track inventory. This is achieved by combining ShopTalk Mobile's applications with a hands-free, lightweight wearable computer and voice technology.

Using a headset with a noise-canceling microphone, workers talk to the system to issue commands and enter data. This allows users to keep their eyes and hands free and focus their attention on the task at hand. The compact, mobile system can go anywhere in the manufacturing or warehouse environment.

Warehouse workers using ShopTalk Mobile are able to process orders faster and get more inventory out to customers or the shop floor, Lazlo says.

Companies can download from their warehouse management system into the ShopTalk server, which sends the information to the small, wireless, wearable computers. A text-to-speech feature directs the picker to the location and to the right product. Because the wearable computer has voice recognition, the computer can understand the workers voice and puts voice commands into the computer as text.

ShopTalk Mobile handles short picks to the extent that if the picker sees that he doesn't have enough of the product for that pick list, the system can put the short items on backorder, and alerts people in the warehouse that the product location needs to be restocked.

Another benefit is that companies trying to be greener can eliminate as much paper as possible by using the system, Lazlo says.

## Hands-free picking

While some competing systems provide the speech element, the wearable computers that come with ShopTalk Mobile have a touch screen, and the information can be viewed on the screen. This can be integrated with hands-free bar code scanner, where the warehouse picker wears a ring scanner on their ring finger.

"All you have to do is scan it, so your hands are still free," Lazlo says. "You can pick more naturally, faster, and with less chance for injury."

The bar code adds an accuracy element, allowing a picker to rapidly scan a whole string of numbers. The voice-directed element allows the picker to get to the bar code prompt quickly so that the computer system talks to the user, and vice versa.

ShopTalk Mobile also can actually call someone on the Local Area Network (LAN). That could be the supervisor, or it could be anyone that the worker needs to speak with to solve his issue.

## Robust technology saves time, reduces errors

ShopTalk Mobile utilizes superior hardware technology and more robust software, which means it can do more things for the customer and provide them with advantages that they can't get with competing systems.

"Our little computers have exactly the same power as your laptop," Lazlo says. "These little computers are wireless, so the information goes back to their computer, real-time. Also, these little portable computers have two cameras in there, so you can use the camera to document damaged product that comes in your door."

The other advantage is that ShopTalk Mobile uses a Bluetooth headset with a bone microphone that cancels out background noise that can interfere with voice recognition when the user is speaking, thereby improving voice recognition accuracy.

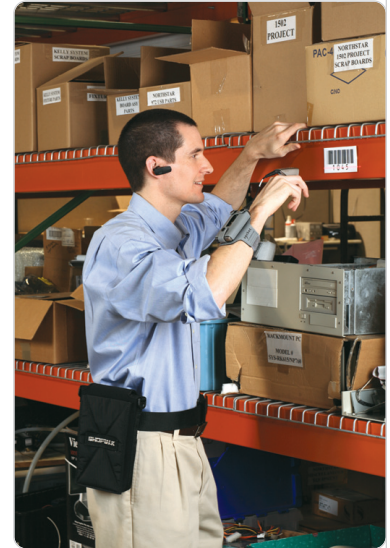
The major benefits of using ShopTalk Mobile are that you can pick faster than you can with paper or bar code scanning alone. The second major benefit is one of improving accuracy.

"You really get the same accuracy as scanning – it is in excess of 99.9-plus percent if it is used correctly," Lazlo says.

Typically, ShopTalk Mobile users realize productivity increases of somewhere between 12 and 30 percent, he says.

"The greatest cost benefit is the accuracy," he says. "If you make a mis-pick, what does it cost you if you send out the wrong item? The increase in accuracy can pay for the system, itself."

FOR FURTHER INFORMATION, CONTACT BOB LAZLO AT (262) 827-3000 EXT. 203, OR GO TO [WWW.GBSVOICE.COM](http://WWW.GBSVOICE.COM)



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