

Bealls Department Stores – Making a Mission Statement

CASE STUDY

MAKING SHOPPING EASIER AND MORE CONVENIENT FOR CUSTOMERS

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Recently Bealls Department Stores and Bealls Outlets, a family of over 260 retail stores predominantly located in Florida, invested over \$8 million dollars to centralize eight warehouses scattered throughout the country into one highly automated distribution center located near the company’s Bradenton, Florida headquarters. Bealls’ distribution center was designed specifically so that the company could realize its mission statement - to make apparel and gift shopping easier and more convenient for its customers.

The new distribution center’s 440,000 square feet of warehousing space hosts a home-grown warehouse management system running on an IBM AS400 platform and supported by a total wireless network solution developed and provided by LXE Inc., an Atlanta-based company and a leader in the design, installation, and support of radio frequency (RF) data communications systems. Because Bealls has been able to gain control over its receiving and shipping processes and lower associated costs through the use of bar coding technology and real-time, accurate warehouse data, the company is able to offer its customers unparalleled value, selection, and convenience. For starters, checkout time has been reduced by 25%, pricing accuracy of clearance and promotional merchandise is next to perfect, and merchandise flow from vendors to the stores is much quicker.

Internally, Bealls is seeing a 99.9% inventory accuracy rate, the system is helping managers to train warehouse personnel to be as productive as possible, and because the company has been able to reduce the overall number of shipments by 20%, associated costs have been slashed. Automation has meant that the company’s once static outbound load delivery system is now dynamic. Deliveries are now scheduled according to the most efficient delivery run and not on pre-planned shipping schedules. Every truck that goes out

now is full, and because drivers are armed with the most efficient delivery route possible, they end up driving less number of miles than before. The system is so efficient that Bealls has even been able to reduce the actual number of delivery runs and the number of trailers it uses for deliveries, saving the company money in fuel and maintenance costs.

According to Scott Santos, Speed Processing Manager at Bealls, the warehouse management system at the new distribution center was truly home grown, from scratch. The distribution processes in the previous eight warehouses were paper-based and therefore inefficient, prone to human error and delays. Earlier this year a multi-functional team consisting of Santos and three others representing the department store side, the outlet store side, and the internal auditing department was formed to determine how best to automate the center. The team agreed that the goal of their WMS would be to monitor and direct the ebb and flow of merchandise through the center from shipment receipt to delivery as productively, accurately, and as cost-efficiently as possible. Above all, the team required that the building, and the WMS, be RF capable so that bar coding technology could be implemented for real-time, accurate warehouse control.

Bealls’ IS department was able to implement each of the team’s recommendations into the logic of the internally developed software. They designed the system fundamentally around LXE’s wireless RF data communications network, which functions as the eyes and ears of the WMS. LXE’s RF network was in place before construction on the building was completed and before the IS department had finished writing the software, according to Tom Riecke, LXE Sales Manager. Bealls’ programmers made sure at the outset that the WMS could integrate RF-transmitted bar code data read off of labeled merchandise by the LXE handheld

LXE

and vehicle-mounted computers located on the floor. "Thanks to the communication between the WMS and the wireless network, warehouse managers now just need to access the system to know exactly what and how much has come in, where it is, and where it's going and when," explains Santos.

Only at the back end does the system require a supplemental software package. Bealls' programmers folded into the WMS an off-the-shelf transportation software package called TruckStops, which divides orders from 30 stores into seven delivery runs, to manage the new dynamic outbound delivery system. Bealls' distribution center has 28 dock doors on the outbound shipping side of the building, all of which are bar coded. Drivers can scan the door where an empty trailer stands to see where that trailer is headed. Once the truck is loaded and gone, the bar code on that door will reflect the change in destination for the next empty trailer that pulls in. This system helps forklift operators who are building the loads to ensure that the right merchandise is going to the right destination. They also know exactly how to load the truck: The system tells them which boxes go in first and how the rows of boxes should be distributed to make best use of the space available in the trailer.

By the end of the year the leftover manual processes that exist now in the receiving end of the distribution center will be converted to the wireless network via full screen LXE vehicle-mount computers. Advance Ship Notices (ASNs), which are now manually entered into the system, will soon be replaced by UCC 128 labels tied into the ASNs that can be scanned and transmitted to the system by the RF hardware. With all manual processes eliminated by year's end, estimates Santos, a carton of merchandise will go through the center and be shipped back out in a matter of hours where now the average shipment time at worst is two days.

The system is used by Bealls' warehouse managers to help train new employees and to show all employees how they can be more productive. The system can furnish managers with reports comparing the productivity of workers with each other and against each employee's own past productivity levels. "One surprising benefit of our RF-backed WMS is that it drives us to perform at record new levels," Santos says. "When we're working this hard behind-the-scenes to

improve productivity, our customers are seeing the latest fashions in our stores faster than ever before. And our pricing, even on sale items, is extremely accurate. We knew that we at Bealls would benefit from having a centralized and automated distribution operation. But now that we're guided by extremely accurate and real-time information, our customers are the ones who really get to enjoy the new way we do business."

The system went live during the height of the Christmas rush. "The software worked, which was phenomenal," says Santos. "And the LXE computers worked without a hitch, right out of the box." Thirteen LXE truck-mounted computers, three handheld computers, and 20 Monarch Ultra RF scanners/printers running on the LXE RF backbone, all of whose signals are relayed to the WMS by eight access points, work with the WMS to ensure that warehouse managers have real-time control over distribution.

To cover the 440,000 square feet of warehousing space, Bealls chose LXE's 2.4MHz open, non-proprietary system which is now running TN5250 to the AS400 via an Ethernet connection. LXE designed the 2.4 system for large coverage areas where data transmission speed is tantamount. According to Riecke, productivity of Bealls' warehouse personnel in large part depends on the system's response time. If RF computer operators on the floor are delayed because the data they are sending and receiving over such a large area takes time to travel to the AS400, productivity suffers. Riecke and Santos agree that response time of the 2.4 system is excellent, and, says Santos, productivity levels are at an all time high.

Only one area of Bealls' distribution center is used as traditional warehousing space, where off-season merchandise that has been purchased for the upcoming season can be stored for several months. The bar code informs RF computer operators where to house this "future merchandise" in terms of exact rack position and level within the storage area. The system will alert managers what and when future merchandise needs to be rejoined with the dynamic flow of goods through the center. According to Santos, the ebb and flow within Bealls' distribution operations now makes perfect sense thanks to the new system directing it.

The logo for LXE Inc. features the letters "LXE" in a bold, blue, sans-serif font. A light blue, curved swoosh is positioned beneath the letters, extending from the left side of the 'L' to the right side of the 'E'.

About LXE Inc. LXE Inc. improves supply chain performance by applying over 30 years' experience developing wireless products and solutions. From wireless computers, advanced auto-ID technologies, and wireless network infrastructure, to our award-winning customer support - LXE's easy-to-use products are as reliable as the people who install and support them.

Based in Norcross, Georgia, LXE also offers a full range of turnkey services, including radio integration, project and installation management, network design, technical support, and repair services. LXE is a wholly-owned subsidiary of EMS Technologies, Inc. (NASDAQ: ELMG), and has offices worldwide. For more information, visit www.lxe.com.