



## *Bar-Coding & Real-Time Supply Chain Management TAKE YOUR ENTERPRISE TO A NEW LEVEL .....*

### Supply Chain Overview - Warehousing

To stay ahead of the competition your warehouse operation must become more efficient and more flexible. Your processes must become more effective and accurate. Your customers are seeking solutions to their own problems and pushing responsibility further back up the supply chain - to compete effectively you have to meet their demands.

Warehouse operations are changing. Stock must be readily accessed, without delay. Bar code-based tracking systems are taking the place of paper-based manual methods. Mobile computing and laser scanning are being used to capture data for accurate tracking and tracing. Wireless communication is providing real-time decision making information.

Your operation must ensure that customers needs are met. Your focus should be such that the warehouse operation is seen from the customers' perspective. What does a customer - internal or external, look for in an effective operation? Typically, the answers are: Product when it is wanted. What has been asked for, and only what has been asked for. Delivery at the appropriate time and the ability to repeat the process without fail, at any time.

So what are the implications for your warehouse? The answer is clear: Establishing the systems and processes that enable these demands to be met and installing the technology to create and implement those systems.

It has been estimated that companies, which generally spend about 10 percent of revenue on logistics and inventory overhead, could halve that by taking full advantage of effective supply chain management planning. Quite simply, "increased information used effectively equals increased profits"

### *Bar-Coding & Real-Time Supply Chain Management System Components*

Bar-Code Printing – SAWIN Pro prints Bar-Codes on labels or documents for Parts, Equipment, Flat-Rate codes, Purchase Orders, Job/Cost Templates etc. using standard Windows Inkjet and Laser printers or Direct and Thermal Transfer printers such as the Datamax 4304.

Bar-Code Reading– SAWIN Pro uses Fixed and Portable Bar-Code Readers to Track Parts and Equipment and their Pricing and Costs. SAWIN Pro also uses Bar-Code Readers to read Bar-Codes on Flat Rate Codes or Job/Cost Templates. Bar-Code Readers increase accuracy and reduces labor costs.

Wi-Fi – SAWIN Pro uses Portable Readers with the 802.11 Wireless LAN for Real Time Communication between the Portable Reader and the Host Database. This State of the Art Technology updates the Host Database in Real Time as each transaction is posted.



Service Automation, Inc.  
17405 Village Green Drive  
Houston, TX 77040  
Tel 800-774-7230 - Fax 949-498-9565  
Website [www.sawinpro.com](http://www.sawinpro.com)  
E-mail [info@sawinpro.com](mailto:info@sawinpro.com)



*Bar-Coding & Real-Time Supply Chain Management  
TAKE YOUR ENTERPRISE TO A NEW LEVEL .....*

## **SAWIN Pro Bar-Coding and Real Time Supply Chain Management Applications!**

### **Receiving Parts and Equipment**

**Create PO** — User Creates PO and Bar-Code labels for receiving merchandise Using SAWIN Pro

**Receiving PO** - User Queries Database with Portable Reader for PO. PO is found and displayed in Portable Reader. The user updates the quantities received and serial numbers associated with the products and receives the parts and equipment to a warehouse, truck warehouse or job in Real Time using the 802.11b wireless LAN.



The Symbol 9000 Portable Bar-Code Reader Increases Accuracy and reduces labor costs.

### **Transferring Parts and Equipment to Warehouse/Job**

**Transfer Parts/Equipment to Warehouse/Job** — User either Queries Database for pick list or creates pick list in Portable Bar-Code Reader. Once the pick list is complete the Parts and Equipment on the pick list can be transferred from the source warehouse to the destination warehouse or job in Real Time using the 802.11b wireless LAN.



Access to 802.11b Wireless LAN requires Access Points Pictured above which are connected to the LAN. The antennas on the Access Points communicates with the antennas in the Portable Readers in Real Time using the 802.11b Wireless LAN.

### **Taking Physical Inventory**

**Taking Physical Inventory** - Physical inventory can be taken in the main warehouse or in the truck warehouses by simply scanning the bar-code label on the product or bin where the product is located in the warehouse. Quantities greater than one are either entered from the keyboard or scanned.

### **Benefits of SAWIN Pro Bar-Coding and Real Time Supply Chain Management Applications**

- **Increased Accuracy using Bar-Code Scanning and Automated Data Collection.** (99% accuracy using Bar-Codes) Human error rate one per 300 Characters — Automated error rate is one per 3 million Characters.
- **Increased Productivity and Reduction in La-**

Service Automation, Inc.  
17405 Village Green Drive  
Houston, TX 77040  
Tel 800-774-7230 - Fax 949-498-9565  
Website [www.sawinpro.com](http://www.sawinpro.com) - Email [info@sawinpro.com](mailto:info@sawinpro.com)



**bor and other data capture**



Bar-Code Printing

## **Bar Code/ Mobile Application**

Service Automation, Inc. has developed and is in the process of developing a suite of mobile applications for the Pocket PC, Tablet PC and Laptop PC, which communicates directly with SAWIN Pro. All these SAWIN applications will incorporate bar code technology primarily for tracking parts, equipment and technician time. Additional Mobile and Bar Code applications are being reviewed and developed based on customer requirements.

SAWIN Pro currently supports printing bar codes for Parts, Equipment, Flat Rate Codes, Job Cost templates and Purchase Orders. Standard Windows Inkjet, Laser and Impact printers' print bar codes on documents in the specified location or sheets of labels based on the label size selected. In addition SAWIN Pro will have the ability to print bar codes on bar code printers such as the Datamax Specialty Thermal Transfer bar code printer.

This specialty printer prints one or many bar code labels at a time in a various sizes and formats which best fits the user application.

Mobile applications require devices that are portable and can be connected to the SAWIN Pro software either in a Wired or Wireless network. The Pocket PC, Tablet PC and Laptop PC are portable battery operated devices, which can be connected to the SAWIN Pro software in three ways as follows:

A Wired connection can be a RS 232 connection to a workstation on the network or a network connection via a network interface available in the device.

A Wireless connection using a Wireless LAN connection (802.11B), which can have a range up to 1 mile.

A Wireless connection using a Wide Area Network such as CDPD, CDMA 1X, or GSM.

### **Bar Code Parts and Equipment Transfer and Receiving Application**

The bar code transfer application is designed to track Parts and Equipment transfers in real time with or without a paper trail. The process is as follows:

User takes portable device to source warehouse to transfer parts or equipment from.

User scans or keys in destination of parts or equipment (warehouse or job).

User scans parts and equipment to be transferred and enters or scans multiple quantities.

User pushes update button on screen and the parts and equipment are transferred to the warehouse or job, all the journal entries are made and the inventory is relieved in the source warehouse and transferred to the destination warehouse.

The bar code receiving application is designed to track Parts and Equipment in real time from a receiving station in the warehouse or job. The process is as follows:

User at time of creating PO or at time of receiving merchandise from vendors creates bar code labels.

User attaches bar code labels to merchandise as the merchandise is received and then scans bar code.

After the items are received on the PO the user pushes the update button and the inventory is updated.

## **SAWIN Pro Mobile Application**

The SAWIN Pro Mobile application is designed to transfer most of the dispatching and invoicing function to the field technician. As the technician move from location to location serving and installing equipment you can observe his activities and the results of his activities on your SAWIN Pro software. The process is as follows:

Scheduler/Dispatcher assigns one call or all the calls for the day to the Field Technician.

The Field Technician dispatches the call assigned to him on his portable device based on the business rules of the organization.

The Dispatch time is recorded when the call dispatched by the Field Technician.

When the Field Technician arrives at the call or starts the work the Field Technician changes the call status.

When the Field Technician completes the work he records his complete time by changing the status of the call.  
After the call is complete the Field Technician may invoice the customer and collect the money for the transaction  
(May be Credit Card, etc.).

The completed call is then posted on the SAWIN Pro software as complete and the Field Technician moves on to his next call.

### **Inventory Counting and Cycle Counting**

The inventory counting and cycle counting application is designed to automate the inventory taking process. The process is as follows:

User selects warehouse where the inventory is to be counted.

User walks thru warehouse with portable device and scans bar code labels on products or on bins and enters the quantity on hand.

After inventory count is completed push button to update inventory comparison screen, which compares on hand inventory with book inventory.

Make inventory adjustments or recount.

#### **Supply Chain Overview - Warehousing**

To stay ahead of the competition your warehouse operation must become more efficient and more flexible. Your processes must become more effective and accurate. Your customers are seeking solutions to their own problems and pushing responsibility further back up the supply chain - to compete effectively you have to meet their demands.

Warehouse operations are changing. Stock must be readily accessed, without delay. Bar code-based tracking systems are taking the place of paper-based manual methods. Mobile computing and laser scanning are being used to capture data for accurate tracking and tracing.

Wireless communication is providing real-time decision making information.

Increasingly, warehouse management has become integral with managing the supply chain. To compete effectively it is vital to access the right knowledge and experience. Symbol has made its reputation by providing customer focused warehousing solutions that approach the entire operation from a 'needs' viewpoint.

Your operation must ensure that customers needs are met. Your focus should be such that the warehouse operation is seen from the customers' perspective. What does a customer - internal or external, look for in an effective operation? Typically, the answers are: Product when it is wanted. What has been asked for, and only what has been asked for. Delivery at the appropriate time and the ability to repeat the process without fail, at any time.

So what are the implications for your warehouse? The answer is clear: Establishing the systems and processes that enable these demands to be met and installing the technology to create and implement those systems.

What are the typical scenarios? Perhaps the warehouse has an old stock control system that produces paper output, or your company is implementing a system such as SAP and thinking whether to use their warehouse modules or consider other options. There may be an existing system, developed over many years, uniquely integrated into your business and now you want to extend its functionality. Whatever

your situation, you have a need that can only be adequately addressed by the development of relevant skills.

Symbol has the skill-set to enable you to meet these challenges across a range of warehousing environments - what ever solution you are seeking. Whether you are implementing a total Warehouse Management System from a 'clean slate' approach; operating an Enterprise System such as SAP or BAAN; using an existing corporate system or have a current WMS solution, we have the products and systems you need. We can offer our customers a range of warehouse management solutions, from complete turnkey solutions, portable data capture systems, RF on-line systems, and front end processing modules.

Our industry specific experience enables us to identify with your environment and recommend the optimum combination of products to create the solution that's right for you and your business.

#### **Automated Data Collection**

- **Key to improving control and providing management with more timely, more accurate and therefore more valuable information**
- **Increased Productivity and Reduced Costs are key benefits of Automated Data Collection**
- **Return on Investment for Automated Data Collection is typically One Year.**

**Bar-Code Printing – SAWIN Pro prints Bar-Codes on labels or documents for Parts, Equipment, Flat-Rate codes, Purchase Orders, Job/Cost Templates etc. using standard Windows Inkjet and Laser printers or Direct and Thermal Transfer printers such as the Datamax 4304.**

**Bar-Code Reading – SAWIN Pro uses Fixed and Portable Bar-Code Readers to Track Parts and Equipment and their Pricing and Costs. SAWIN Pro also uses Bar-Code Readers to read Bar-Codes on Flat Codes or Job/Cost Templates. Bar-Code Readers increase accuracy and reduces labor costs.**

**Wi-Fi– SAWIN Pro uses Portable Readers with the 802.11 Wireless LAN for Real Time Communication between the Portable Reader and the Host Database. This State of the Art Technology updates the Host Database in Real Time as each transaction is posted.**