

An ASAP Systems eBook



A Buyer's Guide

Stock Inventory and Asset Management

Part 1: A Guide to Barcode Track and Trace Systems — What to Consider
Before Purchasing a Stock Inventory and Asset Management System

Author: Elie Jean Touma
CEO, ASAP Systems

CONTENTS



PART 1	26	BARCODE VS. RFID TAG CONT.	14	PART 2	26
A Guide to Barcode Track and Trace Systems		Two Dimensional or "2D" Barcodes		Preparation, Installation and Training	
INTRODUCTION	2	SOFTWARE INTEGRATION	15	INTRODUCTION	29
The First Step	2	A TOTAL SOLUTION? CUSTOMER SUPPORT	16	PREPARATION	30
Assets vs. Stock Inventory	3	Total Solution or Just Software?	16	Preparing to Install the Software	30
Terminology	4	Customer Support	16	Does Your System Meet the Basic Requirements?	31
It's Time to Automate	5	THE TRUE COST OF OWNERSHIP	18	Things to Consider Before Training	31
Creating Your Ecosystem	6	Out-of-the-Box	18	Questions to Ask About installation	31
FINDING THE RIGHT VENDOR	7	Custom	18	TRAINING AND PRE-LAUNCH PLANNING	32
Where to Look	7	Configurable	18	Category 1: Configuration and Administrator Training	32
Start With a Live Demo	7	DECODING HIDDEN COSTS	19	Category 2: Planning for Data Management	33
THE TECHNOLOGY	8	Questions to Ask	19	Category 3: Daily Users Training	35
The User Interface	8	User Fees	19	Category 4: Testing	35
Ribbon-Based and Tree-Based Software Interface	8	Label Fees	19	CHECKLIST: PREPARATION, INSTALLATION & TRAINING	32
Lifecycle-Based Software Interface	9	Report Fees	19		
How Flexible Is the Software?	10	Barcode and Catalog fees	20		
Questions to Ask	10	Training Fees	20		
Is It Scalable?	10	COMPARISON OF SHORT AND LONGTERM COSTS	21		
Reporting	11	PURCHASING CHECKLIST	22		
BARCODE VS. RFID TAG	12	Basic Needs	22		
What's the Difference?	12	Vendor Evaluation	23		
One Dimensional or "1D"		SUMMARY	25		
Linear Barcodes	13				

INTRODUCTION

A Guide to Barcode Track and Trace Systems



THE FIRST STEP: YOU'RE LOOKING

The fact that you are reading this eBook says that you are looking for or at least considering an asset management and/or stock inventory system. Maybe you have been manually tracking your assets, inventory, associated costs, and people using an excel spreadsheet or just a clipboard and paper.

This eBook will help guide you through the key issues you should consider and important questions you should ask prior to purchasing your system.



INTRODUCTION



ASSETS VS. STOCK INVENTORY

WHAT IS THE DIFFERENCE?

For most companies, a **fixed asset** typically represents durable equipment, machinery, PCs, tools and the like. For tracking purposes, each of these assets has a unique barcode identifier.

In comparison, your stock room or warehouse consumable **stock inventory** is tracked by a common stock item number or SKU identifier that is used for all products or items within a specific line. If the stock inventory is tracked by batch, lot or serially then a specific batch, lot or serial barcode identifier would be used.

QUESTIONS TO ASK . . .

Do you need your system to track depreciation?

Will your system allow you to track both assets and stock inventory?

What are your needs?

From a financial perspective, fixed assets lose value over time, i.e. they depreciate. Do you need your system to track depreciation? Will your system allow you to track both assets and stock inventory? Most companies have a mix of fixed assets and stock inventory. Although both act as assets, each gets treated differently on a company's financial statements.

For startups seeking funding, for example, potential lenders and banks scrutinize fixed assets very closely. This is why tracking your inventory and assets separately and accurately is critical.

No matter what your industry or what you are tracking — unique stock items, general inventory, business assets such as electronic equipment (PCs, laptops, mobile devices, etc.) or assets and inventory that is shared or distributed through a central operation — your organization should experience all the benefits of asset and inventory control that have been proven and are currently being used in the retail market.



INTRODUCTION



TERMINOLOGY

For the purpose of this eBook, let's define some key words that are used throughout this guide.

Customized

Built from the ground up by the vendor to meet the specific needs of the customer's unique environment.

Configurable

Software that is written to permit modification by users. In other words, "customizing" an existing feature on your own.

For example, how flexible are the data collection fields? Can you configure reports by renaming fields, adjusting or hiding columns? Are there a limited number of reports or are they unlimited?

Feature set

What features does the product come with and are you able to add them at a later time? Feature set is synonymous with modules. Are all the features you need available? Check out/in, advanced security, text and email alerts, kitting, etc.

Concurrent users

How many users will be using the software at the same time? This is different than the total number of people that have access to the application or the total number of installs on PCs and users who simply want to view a report.



INTRODUCTION



IT'S TIME TO AUTOMATE

Along with increased time and resources, tracking assets or inventory manually can be costly. Lost items and the inability to track depreciation or automate maintenance schedules can leave your asset group or inventory depleted.

If you can't trace an item's location or history of use, it can lead to supply shortage, inaccurate data and reporting, and wasted resources for data entry.

Maybe you are experiencing too many inaccuracies in the management of your assets and inventory or the cost of manually tracking is too high and you want to integrate it directly into your accounting software. Or, perhaps you want to track every kind of asset that's essential to your organization or business, such as:

- Items that are essential to patient care (for healthcare groups)
- Shared assets among a particular group (such as military housing or electronic equipment for schools, government agencies or nonprofits)

- Hard copies of files and paperwork that have to be stored in a physical location
- General inventory for a business or other organization

These are just a few examples of why a business or organization would consider automating their asset and inventory management with software. Whatever your business reasons are — or whatever your business does — it is critical to find the right solution that fits into your process and budget.

Create Your Checklist

The goal of this eBook is to help guide you in creating a checklist that speaks to your business's specific needs.

- What information do you need to ask the vendor?
- What is the True Cost of Ownership (TCO)?
- How does the vendor's technology fit with your long-range business goals?



INTRODUCTION



CREATING YOUR ECOSYSTEM

Know your needs from the get-go

Before talking to any vendors, your first step should be to understand the needs of your organization and to assess its challenges. Ask yourself the key questions shown in the column to the right. In addition, make a list of your pain points. This will ensure clear communication between you and the vendor and give them an opportunity to demonstrate to you how their solution will address your specific needs.

HOW TO PREPARE . . .

Answer key questions about your needs and the parameters of the project.

Make a list of your pain points.

Here are some key questions to ask:

- What is my budget?
- What is my current system of tracking?
- Am I tracking assets or stock inventory or both?
- What items am I tracking or do I want to track?
- What is my biggest issue related to tracking?
- How would implementing a system that solves these issues affect the business and my success within the organization?
- How many total users will there be? How many are concurrent users?
- How many users will need to use a mobile barcode or RFID device? How many devices (barcode scanners) will I need?
- Do I need an immediate "fix" or do I want my solution to grow as my company grows?



FINDING THE RIGHT VENDOR



FINDING THE RIGHT VENDOR

How do you search for the right partner and how do you know if they have the right solution?

Where to look

Certainly an internet search on key words such as “inventory management system,” “asset tracking,” and “barcode scanners” will bring up several different vendors. You can also look at barcode community sites, trade associations, magazines, events and resellers.

On the surface, many products and solutions look the same. Probe a little deeper, though, and you will discover key differences that should be considered prior to making any purchase decisions.

Start with a live demo

The best way to see what any software can do is to have a live demo, and make sure it's a one-on-one demo. If there are a lot of different companies on the call, it is hard to find out how your specific needs will be addressed. Avoid a video-taped demo. If it is the only type of demo available, it's best to assume that whatever the video shows is exactly what is offered by the vendor. If you have needs that aren't addressed in the video, call the vendor or schedule a live demo so they can address your needs and answer any questions you have directly.

GOOD TO KNOW . . .

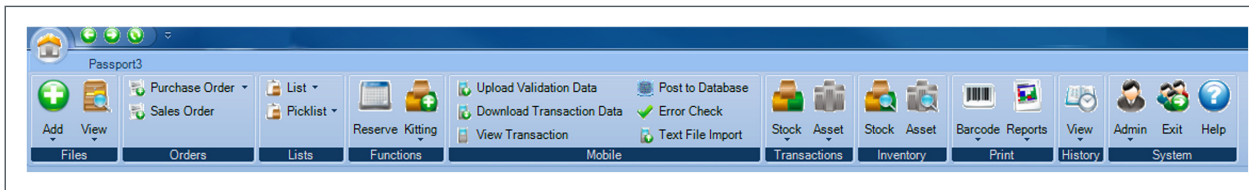
The best way to see what any software can do is to have a live demo, and make sure it's a one-on-one demo.



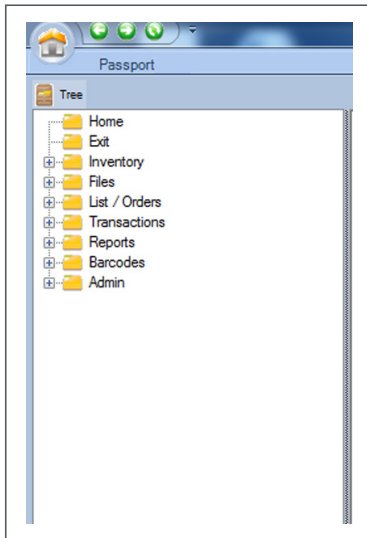
THE TECHNOLOGY



Ribbon-Based Software Interface



Tree-Based Software Interface



THE TECHNOLOGY

What are the important questions you should be asking in regard to the technology? For example: How often does the company upgrade their software? Is it cutting edge and feature rich? What does the software interface look like?

The user interface

In the age of mobile technology, smart phones and tablets, our expectations about what the software's user interface should look like have changed. We expect it to be friendly, intuitive and easy-to-use, and that it looks similar to the software we are accustomed to using in our daily lives.

When the vendor takes you through a live demo, you will see several different types of software user interfaces: a ribbon-based, tree-based, or lifecycle-based interface.

Ribbon and Tree-Based Software Interface

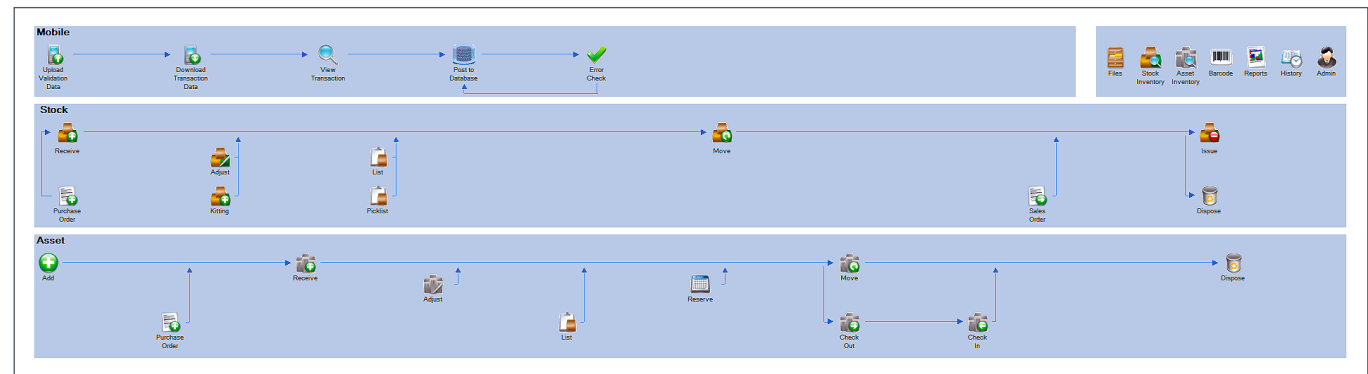
Ribbon-based and tree-based are the standard interfaces with the menu bar on the top or the drop down menu on the left hand side of the screen (see examples to the right).



Lifecycle-Based Software Interface

Lifecycle-based, which is considered best of breed, is unique because it allows you to predict what the next click will be — from the birth of the product to end-of-life.

Lifecycle-Based Software Interface



GOOD TO KNOW . . .

When the vendor takes you through a live demo, you will see several different types of software user interfaces: a ribbon-based, tree-based, or lifecycle-based interface.

THE TECHNOLOGY

**How flexible is the software?**

Make sure the software captures what you want to track. For example, you may need a budget code added to the “receive” form or you may need your inventory or assets to be associated with a particular department.

GOOD TO KNOW . . .

A modular-based design can be beneficial because you only purchase what you need, when you need it. This makes it possible for the software to expand as your organization grows.

Ask these questions before you buy:

- How does the software collect data?
- Are you capturing all the data you need?
- Are the barcode scanners verifying the assets or inventory each time you scan?
- Once the data is collected, can it be transmitted to the application via Wi-Fi, 3G cellular connection or USB cable?
- Can you assign how to track: by box, case, drum, or vial? Or, maybe you need to receive by the case, but within that case you want to show there are 24 pieces?
- Do you need to modify the barcode labels and configure the labels per item or per case? Is there a feature for that?

It's important to know which features are already included in the software and which ones are not. Ask the vendor if adding these features in the future will be billable or if you can do it on your own at no cost?

Is it scalable?

Can the software grow with your company? For example, a modular-based design can be beneficial because you only purchase what you need, when you need it. This makes it possible for the software to expand as your organization grows.

When you license a module, you will also get updates and upgrades. If you have certain future needs that aren't directly addressed in the demo, make sure the software has a module for that, otherwise you may find yourself spending more money at a later date to have the module built for you.

THE TECHNOLOGY



Reporting

Does the software offer unlimited, custom reports or just a limited number of canned reports? In some instances, canned reports are fine, but if you suspect you will be adding reports, changing naming conventions, or that you'll need the ability to turn on and off data fields, ask the vendor if adding these features is at no cost or billable? Or, can you do it yourself?

For example, you may want to run a series of inventory reports to quickly determine which products are needed at different business locations or divisions, but the items at each location or division are unique and specific to that particular group. You will need a reporting function in your software that allows you to create custom inventory reports for each entity you're working with.

What if you don't want certain reports to be visible to everyone? Or, what if you need to change the format of the reports? These types of requirements present some of the hidden costs you may not be aware of before purchasing.

Basic Report

asap SYSTEMS			ASAP Systems Headquarters 175 Bernal Road Suite 240 San Jose, CA 95119 USA
Stock Inventory Report			
Stock #	Stock Description	Quantity	
X353-10	1 inch dial indicator	567	
VNMG331UFC095	Carbide insert, CVD coated	546	
TNG221K68	Carbide insert, uncoated	332	
TK	Tool Kit	24	
STX353	1 inch dial indicator	45	
SSR-316-4	Bar stock 12Lx4 D 316 sta	45	
SNMG543K0C850	Carbide insert, CVD coated	657	
S32V-CT-FPR-4	2 in dia Boring Bar, RH	32	
S24U-CT-FPR-4	Boring bar, RH, 1-1/2 in D	246	
QD275	3/8 inch 5-75 ft. lb.	343	
L190	Portable Suction Unit	6	
L190	Portable Suction Unit	44	
KIT-ABC	KIT-ABC	2	
HTC80380	Flycutter, 8 inch	564	
HTC80331	Flycutter 3 in	65	
HTC80330	Flycutter, 3 in D, Shank 3/4	6,788	
HTC29210XL	Boring bar, 1/4 D, 3 L	98	
HTC29210L	Boring bar, 1/4 D, 2-1/2 L	232	
HTC29210-C3	Boring bar, 1/4 D, 2 L	54	
HTC29210	Boring bar, 1/4 D, 2 L	235	
HTC29150XL	Boring bar, 3/16 D, 2-1/2 L	500	
HTC29150-C3	Boring bar, 3/16 D, 2 L	1,233	
HTC29150	Boring bar, 3/16 D, 2 L	74	
1/9/2012 2:23 PM		Page 1 of 6	

Custom Report

asap SYSTEMS			ASAP Systems Headquarters 175 Bernal Road Suite 240 San Jose, CA 95119 USA
Custom Stock Inventory Report2			
Location Name: Warehouse 2, Row 2			
Stock #	Stock Description	Quantity	Extended Cost
04888-50-15	Normal Saline, .9% 50mL MDV	3 BLS	\$9.05
0548-2190-00	Lidocaine HCL 2%, 5mL PFS	1 BLS	\$4.99
4277-02	Lidocaine HCL 2%, 50mL MDV	5 BLS	\$29.81
Total:			\$43.85
Location Name: Warehouse 2, Row 1			
Stock #	Stock Description	Quantity	Extended Cost
5-30406	Uncuffed ET Tube, 3mm	7 BLS	\$77.00
5-10314	Cuffed ET Tube, 7mm	5 BLS	\$26,772,781.82
5-30410	Uncuffed ET Tube, 5mm	9 BLS	\$6.73
04888-50-15	Normal Saline, .9% 50mL MDV	8 BLS	\$24.14
42766	Insulated Blanket 56x90	2 BLS	\$173.44
4434	Band-Aid, Flexible Fabric, 1x4	176 BLS	\$2,112.00
5-10310	Cuffed ET Tube, 5mm	1 BLS	\$43.79
Total:			\$26,775,216.92
Location Name: Warehouse 1, Row 2			
Stock #	Stock Description	Quantity	Extended Cost
1000-003	Kit - Micrometer	4 Supplies	\$223.84
L190	Portable Suction Unit	6 ALS	\$72.00
Total:			\$295.84
1/9/2012 2:32 PM		Page 1 of 9	

QUESTIONS TO ASK . . .

Does the software offer unlimited, custom reports or just a limited number of canned reports?

BARCODE VS. RFID TAG



BARCODE TAGS VS. RFID TAG

When it comes to labeling your stock or inventory for tracking, there are two technologies that dominate the market today: the traditional **barcode** and the newer **Radio Frequency Identification (RFID) Tag**.

What's the difference?

Barcodes require a line of sight. The barcode scanner must "see" the barcode. RFID tags depend upon a radio signal, and thus a line of sight is not required. Because of this, RFID can read multiple tags instantly and therefore gather data faster than barcodes that are always read one at a time.

Typically, the choice between using barcodes or RFID comes down to cost and efficiency. A good rule of thumb is that the RFID solution is about 10 times more expensive, but the payoff might be worth it — especially if a lot of your costs are tied up in manpower and fixing inaccuracies.

	BARCODE	RFID
GEEK QUOTIENT	Print out label, stick on object, scan. Not rocket science.	Hmmm...do we know anyone who studied radio waves?
DO YOU SEE ME?	Line-of-sight on item is necessary.	Even if you don't see the tag, the RFID reader will.
THE MONEY, HONEY	A label costs fractions of a penny.	Tag costs vary from 11 cents to a couple of dollars (for specialized tags).*
IMMUTABLE LAWS OF PHYSICS	Scanner reads bar code—if nothing is in the way, no problem.	Metals and liquids don't play nicely with wireless waves.
STORAGE APPETITE	Data volumes for warehouse management systems are growing, but the number of gigabytes is manageable.	Warehouse management systems can generate 10 to 100 times more information than traditional bar code technology.
PRIVACY, PLEASE	Printed bar code labels can't tell anyone much.	Passive and active RFID tags can tell anyone a whole lot.

Excerpted from CIO.com

*NOTE: It's difficult to say what the exact price is per tag because companies that sell RFID tags price them based on volume, the amount of memory on the tag, the packaging of the tag, whether the tag is active or passive, and much more. In 2011, the more commonly used passive tags range in costs from 12 to 18 U.S. cents for a volume of 10,000 and 11 to 14 cents for 100,000. The price will increase if the tag is embedded in a thermal transfer label on which companies can print a bar code. Low- and high-frequency tags tend to cost a little more as well.

BARCODE VS. RFID TAG



One Dimensional or "1D" Linear Barcodes

There are many choices of barcodes available. Choosing the right one depends on your standards and requirements. The most common barcode symbologies that organizations use for assets and stock inventory are One Dimensional or "1D" Linear Barcodes: **Code 39** and **Code 128**.



Code 39

Code 39 allows you to define 43 characters consisting of uppercase letters (A through Z), numeric digits (0 through 9) and a number of special characters.

Possibly the most serious drawback of Code 39 is its low data density – it requires more space to encode data in Code 39 than, for example, in Code 128. This means that very small goods cannot be labeled with a Code 39–based barcode. However, Code 39 is still widely used and can be decoded with virtually any barcode reader. One advantage of Code 39 is that it can easily be integrated into existing printing systems by adding a barcode font to the system or printer and then printing the raw data in that font.



Code 128

Code 128 is a higher density symbology that includes the full 128 ASCII character set that allows lowercase letters and additional characters. By use of an extension character (FNC4), it can encode the Latin-1 characters defined in ISO/IEC 8859-1.

GS1-128 (formerly known as UCC/EAN-128) is a subset of Code 128 that is used extensively worldwide in shipping and packaging industries as a product identification code for the container and pallet levels in the supply chain.

GOOD TO KNOW . . .

The most common barcode symbologies used for assets and stock inventory today are 1D Linear Barcodes: Code 39 and Code 128.

BARCODE VS. RFID TAG



Two Dimensional or "2D" Barcodes

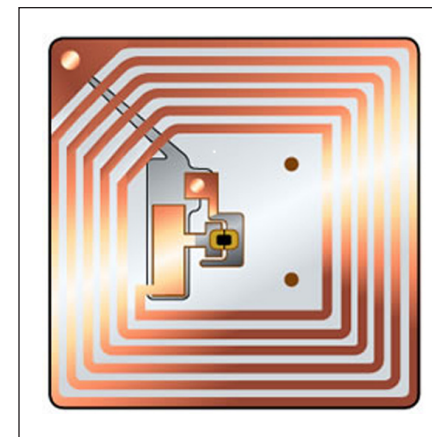
For many, the "latest and greatest" barcode technology existing in the market today is Two Dimensional (2D) Barcodes, which allow for the barcode to hold a considerable amount of data. They are ideal for companies that are tracking and moving data or information between different organizations and need it to be passed along directly, emedded in the barcode, versus indirectly through exchanged data files or paperwork.

For example, if someone in Indiana gets food poisoning from strawberries they bought in a grocery store, 2D barcodes will have all the information they need: What field were the strawberries picked from? On what day? In what city and state? Driven by what truck? Who was the distributor?



Data Matrix Barcode

Data Matrix is a two-dimensional (2D) matrix barcode that uses a small area of black and white square modules with a unique perimeter pattern that helps the barcode scanner determine cell locations and decode the symbols. Characters, numbers, text and actual bytes of data may be encoded, including Unicode characters and photos. Error correction codes are added to increase symbol strength which means that even if they are damaged, they can still be read.



Radio Frequency Identification (RFID) Tag

Radio frequency identification (RFID) is a generic term that is used to describe a system that transmits the identity (in the form of a unique serial number) of an object or person wirelessly, using radio waves. It's grouped under the broad category of automatic identification technologies.

GOOD TO KNOW . . .

2D Barcodes allow for data or information to be embedded in the tag, which can then pass between different organizations, companies or other entities.



ACCOUNTING SOFTWARE INTEGRATION

QuickBooks™ software is great for accounting. In fact, almost 90 percent of small and medium businesses use QuickBooks™ for their accounting purposes. If this is the case for your business, make sure your stock inventory management system integrates seamlessly with QuickBooks™. That integration will allow you to synchronize and authenticate items, vendors, purchase orders, customers and sales orders.

GOOD TO KNOW . . .

Integration with your accounting software will allow you to synchronize and authenticate items, vendors, purchase orders, customers and sales orders.

If you use accounting software other than QuickBooks™, here are some things to consider:

1. What database does each run on?
2. What data do you want to integrate?
 - Stock item numbers?
 - Front-end (receiving) activities such as vendor information and purchase order details?
3. Ultimately, what system do you envision to be your primary and secondary system? In other words, do you want your tracking system (primary) to gather data on your stock items, Work in Progress (WIP), raw materials, and finished goods on a daily basis and then integrate that data with your accounting (secondary) or vice versa?
4. The same consideration goes to your backend (shipping) activities such as
 - Customers jobs
 - Sales orders
 - Issued items





TOTAL SOLUTION OR JUST SOFTWARE?

Is the vendor an Independent Software Vendor (ISV) or a Solution Provider (SP)? If they are an ISV, you will have to plan on buying additional hardware separately, such as the barcode scanner and barcode label printer. If you want to buy everything at once, and thus avoid having to spend more time looking for additional hardware, find out if the vendor is partnered with the companies that manufacture handheld mobile barcode scanning devices and barcode label printers.

CUSTOMER SUPPORT

Excellent customer support is essential for the life of the product you purchase, especially if you have hundreds of assets or a warehouse and have been tracking with a pencil and paper or spreadsheet. The process of converting over to an automated system will have some growing pains and you will want to ensure the vendor's customer support matches your needs so that the transition doesn't affect your company's downtime.

If you like the software technology and it looks like the right solution, ask about the type of support, implementation and training you will receive. Do they provide different support packages? If so, what are the differences between them? In most cases, you might not need the most expensive plan they offer. What additional value does each plan bring?

During training, does the company offer best practices advice for things like naming conventions and ecosystem setup? Are they able to share what they've learned from other similar customers that could speed up your learning curve?





24/7 Support

Although some vendors might claim 24/7 support, it's important to find out what exactly is offered. If you need support at 3 a.m., is that support going to be from a live person, is it automated, or is it an online chat? What is the response time? If they have a blanket \$200 support plan, odds are that it will be impossible to get instant support without having to wait for hours. Are you comfortable with a 24-hour resolution turnaround or do you need turnaround in less than three hours?

Installation and training

One of the most difficult challenges of any new tracking system — no matter who you buy it from — is the installation. Even if you are buying the best solution out there, the installation is still going to be demanding because there are so many moving parts, such as:

- Variations of your PC's operating system
- Variations of your server's operating system

- Routers and firewalls may come into play
- Administration rights and security permissions
- Barcode scanners that need to be configured and connected via USB, Wi-Fi or 3G
- Barcode label printers that need to be installed and configured

Every company is different

You have your own security policy, firewalls, and network, along with different routers. Is the vendor going to assist with the install or are you and your IT staff expected to do it alone? Ideally, you want a vendor present to help ensure a minimal drain on your IT resources.

How long is the training? Do they come on-site, is it online, or is it over the phone? If you hire someone new or if someone quits, can they receive training for free?

These are all important support questions you should be asking your vendor prior to making a purchase decision.



THE TRUE COST OF OWNERSHIP



THE TRUE COST OF OWNERSHIP

There are typically three standard tracking software applications for stock inventory and asset management that cover data collection, transactions and reporting: **Out-of-the-Box**, **Custom** and **Configurable** solutions.

Out-of-the-Box

This can be a great solution because it's easy to install and typically the least expensive at initial purchase (see chart "**Comparison of Short and Longterm Costs**" on page 21). However, it's important to know what you need today and what you will need three or six months from now.

GOOD TO KNOW . . .

There are three standard tracking software applications for stock inventory and asset management: **Out-of-the-Box**, **Custom** and **Configurable** solutions.

These types of solutions typically come with 10 to 15 "canned," one-size-fits-all reports that cannot be configured. Some reports might offer too many or too few data collection fields. Data collection fields cannot be added, edited or modified. That might be fine, but if you anticipate having to configure your reports or the naming conventions of your data collection fields, you are stuck.

It can often be confusing to employees if the assets and stock inventory naming conventions don't reflect the company's specific language. Instead of having a data collection field displaying "asset number," for example, your company might call it "item ID."

Custom

Custom solutions tend to have long development and implementation cycles that are costly (see chart "**Comparison of Short and Longterm Costs**" on page 21). If you have a large deployment with very specific requirements, though, a custom solution may be the right choice.

Configurable

Configurable systems address both the benefits of an out-of-the-box solution and large-scale custom solution, which makes them the best bet for most organizations and thus the way of the future.

Usually these systems allow you to customize the data collection fields and configure, modify and create unlimited reports.

You can mold these systems to fit your organization's culture and way of tracking because by the time it's all said and done, users are looking at terminologies they are accustomed to. They are looking at the right amount of data collection (keeping in mind that too much is confusing and too little is frustrating).

Ultimately, because they are so adaptable, the short and longterm cost of ownership is always lower for configurable systems (see chart "**Comparison of Short and Longterm Costs**" on page 21).

DECODING HIDDEN COSTS



QUESTIONS TO ASK . . .

Can you configure the barcode labels or is there an additional charge for that?



Basic Asset Barcode



Basic Stock Barcode



Custom Asset Barcode



Custom Stock Barcode

DECODING HIDDEN COSTS

User fees

How does the vendor charge for users? Make sure they are charging for concurrent users and not for all users or those who just need to look at the data. For example, you may have 50 employees but only 20 need to view or print reports; 10 others are daily users, however those 10 are split into two shifts. Make sure you are only paying for five licenses because at any given time, only five people are using the app at the same time. You should never pay for your “view only” users or the users that are away and not using the app simultaneously.

Label fees

Can you configure the barcode labels or is there an additional charge for that? See examples of custom barcode labels to the left.

Report fees

Ask the vendor if there is an additional cost to create a new report or to add, modify or edit (AME) an existing report. Are there limits to how many reports you can create?

DECODING HIDDEN COSTS

**Barcode catalog fees**

Does the vendor offer a **Barcode Catalog** with item or stock number, description and image — a list that you can scan? A barcode catalog can sometimes make your process easier and faster because you scan a barcode location instead of walking to it. Can you add a new catalog or are they preset catalogs? What if you want to modify the security levels? Can you hide fields? Can you adjust the fields?

Training fees

People change jobs frequently. If your admin leaves the company or is simply on vacation, business shouldn't stop. Does the vendor continue to train your staff or is it an additional charge?

Stock Items Catalog

Stock #	Stock Description	
0000	Batch Stock 0000	
015547B	32" Sony Monitor	
04888-50-15	Normal Saline, .9% 50mL MDV	
0548-2190-00	Lidocaine HCL 2%, 5mL PFS	
08050200	Symbol MC70	
08050201	Symbol MC9090	
1000-001	Kit - Delray	
1000-002	Kit - Spander	
1000-003	Kit - Micrometer	

Barcode Catalog

A COMPARISON OF SHORT AND LONGTERM COSTS



The table gives a snapshot of the true short and longterm costs of the three types of solutions mentioned here: Out-of-the-Box, Custom and Configurable The dollar figures in the chart are hypothetical.

TYPE OF SOLUTION	ESTIMATED INITIAL INVESTMENT	ADDITIONAL COST 3-6 MONTHS LATER	WHAT HAPPENED AFTER A FEW DAYS OF USAGE?
Out-of-the-box	\$2,000	\$7,000 + Wasted Manpower	<ul style="list-style-type: none"> • The canned reports were too vague and needed adjustment • Needed more reports • Frustrated users wanted to see the data that is relevant to their job functions only • You realize that "one-size-fits-all" doesn't fit • You realize what will fit is going to cost you an average \$195 per hour for information gathering, engineering, Q&A, deliveries, etc. — assuming that the vendor is capable of delivering • This list can go on . . .
Fully Customized	\$100,000	\$100,000+	<ul style="list-style-type: none"> • Your initial investment is exactly what that is — initial • You are an endless revenue stream for the vendor • Most aspects of your interaction with the vendor are billable
Configurable	\$7,000	\$0	<ul style="list-style-type: none"> • You configure reports yourself as part of the feature set of the software and have no additional cost • You show, hide, and rename data collection fields • You create, configure, and adjust your own reports and set your own security rules • On a user level, folks display data that's relevant to their jobs • And the list goes on . . .



YOUR PURCHASING CHECKLIST

PURCHASING CHECK LIST: BASIC NEEDS

Top 25 things to consider when looking for a Stock Inventory and Asset Management System

Use this table to assess your basic needs.

	Yes?	No?	Both?	Cost?	Comments
Basic Needs — Creating Your Ecosystem					
Am I tracking any unique items? (i.e. capital assets, tools, people, office equipment, etc.)					
Am I tracking quantity-based items? (i.e. inventory, supplies, etc.)					
Are my quantity-based items serialized, lot-based, or batch-based?					
Besides common movements, do I need to check items in/out with due dates for return?					
What tracking needs do I have outside of the common acquisition, movement and consumption of items? (i.e. maintenance tracking or Work in Progress (WIP), depreciation or Wi-Fi data synchronization etc.)					



YOUR PURCHASING CHECKLIST

PURCHASING CHECK LIST: VENDOR EVALUATION AND COMPARISON

Top 25 things to consider when looking for a Stock Inventory and Asset Management System

Use this table to compare vendors.

	Yes?	No?	Both?	Cost?	Comments
Vendor Evaluation — Is it a good fit?					
VENDOR A:					
Do they offer live demos?					
What type of support packages do they offer?					
Is there a guaranteed resolution time turnaround?					
Do they charge for additional training?					
Is it required to use your own IT resources to install and use the software?					
VENDOR B:					
Do they offer live demos?					
What type of support packages do they offer?					
Is there a guaranteed resolution time turnaround?					
Do they charge for additional training?					
Is it required to use your own IT resources to install and use the software?					



YOUR PURCHASING CHECKLIST

SOFTWARE EVALUATION / ARCHITECTURE

Top 25 things to consider when looking for a Stock Inventory and Asset Management System

Use this table to compare and evaluate the software for each vendor.

	Yes?	No?	Both?	Cost?	Comments
Software Evaluation / Architecture — How Will It Work in Your Environment?					
VENDOR A:					
Is the interface easy to use?					
Is it a ribbon-, tree- or lifecycle-based interface?					
Is the software modular-based? (i.e. no need for paid customizations)					
Does it work with both barcodes and/or RFID scanning if you need it to?					
Are you able to configure it to the way you track? (i.e. renaming, adding or hiding data collection fields)					
Is it client/server architecture?					
Is it cloud-based?					
Do they only offer fixed reports?					
Does it Integrate with QuickBooks™?					
Is the database scalable and an open architecture or is the database proprietary? (i.e. do you or your IT staff have access to the backend database?)					



YOUR PURCHASING CHECKLIST

SOFTWARE EVALUATION / ARCHITECTURE

Top 25 things to consider when looking for a Stock Inventory and Asset Management System

Use this table to compare and evaluate the software for each vendor.

	Yes?	No?	Both?	Cost?	Comments
Software Evaluation / Architecture — How Will It Work in Your Environment?					
VENDOR B:					
Is the interface easy to use?					
Is it a ribbon-, tree- or lifecycle-based interface?					
Is the software modular-based? (i.e. no need for paid customizations)					
Does it work with both barcodes and/or RFID scanning if you need it to?					
Are you able to configure it to the way you track? (i.e. renaming, adding or hiding data collection fields)					
Is it client/server architecture?					
Is it cloud-based?					
Do they only offer fixed reports?					
Does it Integrate with QuickBooks™?					
Is the database scalable and an open architecture or is the database proprietary? (i.e. do you or your IT staff have access to the backend database?)					



YOUR PURCHASING CHECKLIST

THE TRUE COST OF OWNERSHIP

Top 25 things to consider when looking for a Stock Inventory and Asset Management System

Use this table to compare the true cost of ownership for each vendor.

	Yes?	No?	Both?	Cost?	Comments
The True Cost of Ownership — What Is Included Now and What Do You Have to Pay for Later?					
VENDOR A:					
Is it an Out-of-the-Box solution?					
Fully customized?					
If you need to add, modify or edit your reports at a later time, will it cost extra?					
Is pricing based on: concurrent users, total users, or total install?					
Does this vendor match my needs and budget?					
VENDOR B:					
Is it an Out-of-the-Box solution?					
Fully customized?					
If you need to add, modify or edit your reports at a later time, will it cost extra?					
Is pricing based on: concurrent users, total users, or total install?					
Does this vendor match my needs and budget?					

SUMMARY



SUMMARY

Buying an inventory and asset management system is an important investment. That's why it's so important to research, plan and do your due diligence upfront to ensure the inventory and asset management system you choose fits your needs today, tomorrow and five years into the future.

Hopefully you have learned:

- What you need to know before you start looking for a solution.
- What to ask the vendor during the sales process.
- What the product going to cost you (the true cost of ownership) today, in three months and in six months.

For more online resources and additional information that can help you begin your research, visit www.asapsystems.com.

An ASAP Systems eBook



A Buyer's Guide

Stock Inventory and Asset Management

Part 2: Preparation, Installation and Training

Author: Elie Jean Touma
CEO, ASAP Systems



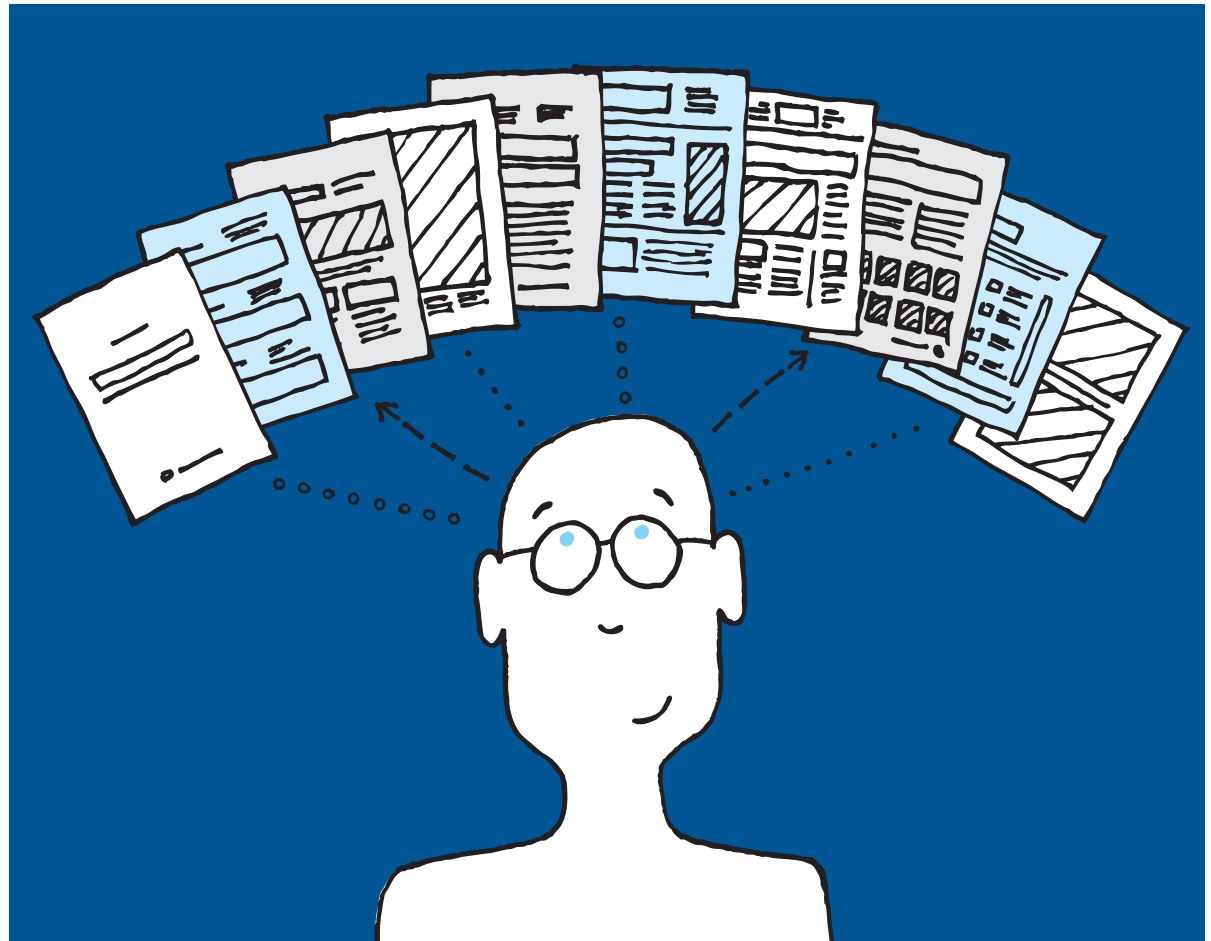
The first steps to implementing a stock inventory and asset management system

INTRODUCTION

After taking the time to research, view demos and compare software solutions, their functionality and their cost, you have likely found an inventory and asset management solution that fits the needs of your business or organization.

Have you also gone through the “Purchasing Checklist” that starts on page 22 in part one of this eBook? If so, and you’ve purchased a system, you’re now ready to move to the next phase: Preparation, Installation and Training.

In this section, you will find an overview of this next phase, as well as advice and guidance on the key issues you should be aware of and questions you should be asking as you go through the process of preparing for and then going through installation and training for your inventory and asset management system.





PREPARATION

Don't rush the process. If you have ordered hardware, it can take up to five days for it to arrive. Once it does, your first step will be to install the software and set up the hardware — at the same time. Typically, it will take up to three days for hardware installation and up to two days to configure. The timing will depend on your available resources.

As part of the installation and setup, make sure your vendor gives you at least four hours of training. You should be able to arrange training on a per-hour basis to accommodate your schedule. Maybe it's an hour a week for four weeks or maybe you want to knock it out in one day! Your vendor should have an agenda for the training that clearly outlines what you will learn from each session.

GOOD TO KNOW . . .

It can take up to three days to install your hardware and up to two days to configure — the timing will depend on your available resources.

Preparing to install the software

Before beginning, be aware that installing the software and setting up your implementation process can be overwhelming. Every business environment is different and every situation unique, which means your IT environment will also be unique. Think of it this way: Your IT infrastructure is like a fingerprint and the software installation will have to be adapted to the specifics of that fingerprint.

Before installing the software, inform your vendor of the following:

- What kind of network structure you have
- What kind of admin access you have to your servers, PCs, routers, switches, and firewalls
- What your brand of server is and what the hardware specifications are (speed, memory, etc.)
- What version of the Windows operating system you are running (or MAC)
- How up-to-date you are with patches and software upgrades that are installed

PREPARATION



Does your IT infrastructure meet the basic requirements for the software?

Before downloading your new inventory and asset management software, make sure your IT infrastructure meets the software's basic requirements. This needs to be done ahead of time, before the install is scheduled. If you experience issues with your infrastructure meeting the basic requirements, a reputable vendor will have an expert with an IT background that is able to help navigate you through those problems. Scripted support will not work.

Once your infrastructure meets the basic requirements, download the software. The install should now go more smoothly.

Don't skip this essential step. It could mean wasted hours down the road for you and the vendor!

Things to consider before training

Until now, you may have been using a clipboard and pen or a spreadsheet to track your assets and inventory. To ensure your organization is up and running on the new

system as quickly as possible, it's a good idea to schedule at least a minimum level of training for you and your team. Software vendors offer different levels of training — from none at all to a high level of hand holding. (Before you even purchase any software, be sure to ask what level of training is offered by the vendor.)

For example, many vendors that offer an out-of-the-box, low-cost solution do not include installation or training. Nor is there a technician to walk you through the steps. Instead, a customer is typically given a user manual with standard instructions on how to download the software.

If you have purchased a more sophisticated, robust system, the training and implementation provided by your vendor is key to ensuring you are utilizing all the features that are available. Good training can shorten the learning curve and have you up and running within days.

Questions to consider before installation

Typically, the installation for an inventory and asset management software system doesn't

take long. To make the process more efficient, though, here are some questions and key issues to consider before beginning the installation:

1. What do I need to install for a client-server environment?
2. What to consider for mobile barcode scanner installation.
 - How do I install and configure my mobile scanner?
 - How do I sync my mobile scanner to the software?
3. What to consider for barcode label printer installation.
 - A barcode label printer is similar to any standard Windows printer in that it connects to your PC via a USB cable or network via Ethernet cable (for network-ready printers).
 - Be aware that you will be asked to download drivers for the printer.
4. How do I import inventory and / or assets into the new system from an existing spreadsheet or database?



TRAINING AND PRE-LAUNCH PLANNING

We recommend that your system training and pre-launch planning be kept as simple as possible. Break it down into categories and bite-size pieces, such as:

Category 1: Configuration and administrator training

Category 2: Planning for data management

Category 3: Daily users training

Category 4: Testing

CATEGORY 1: CONFIGURATION AND ADMINISTRATOR TRAINING

A key part of getting your system up and running is configuration. Start the configuration process by setting yourself up as an administrator. Then, set up other users with the proper administrative roles and security groups.

Next, set the system preferences to ensure the system is customized to your business environment, processes and tracking needs. You may need to turn on or off some data collection fields or folder tabs, or you may need to rename specific field and tabs.

If, for instance, you are integrating the system with an Active Directory software or an accounting software such as QuickBooks™, make sure the data flow is set to your preferred direction.

For example, you may want to pull or push user names and passwords from the Active Directory software. Or, you may want to pull or push your stock numbers directly from your accounting software. Whatever your needs, all of the data flow types must be considered ahead of time and preset by an administrator. This is why administrator training is crucial.

GOOD TO KNOW . . .

A key part of getting your system up and running is configuration. Planning ahead will save valuable time and limit frustration down the road.

**GOOD TO KNOW . . .**

Decide how to divide and categorize the assets and inventory within your organization — how granular will you be with naming conventions?

CATEGORY 2: PLANNING FOR DATA MANAGEMENT

Categorize inventory and assets

You should plan exactly how detailed you would like to be in dividing and categorizing the inventory and assets in your organization prior to going live with your system.

For example, do you want to track assets located on the third floor? Or, do you want to drill down to a granular level, such as tracking assets located on the third floor in room 305, cubical one, drawer three? Do you want to know the level of stock inventory items in warehouse one? Or, do you want to be more specific, such as warehouse one, row six, shelf three, box six?

Categorizing items will give you a birdseye view of your assets and inventory. It will also help answer questions such as:

- What is the dollar value of all my personal computers?
- What is the overall dollar value of my medical supplies?

- What items are below a certain pre-defined level of inventory?
- Do I need to buy from a particular vendor?
- How many personal computers do I have in department A and how many in department B?

Plan barcode numbering

You should also plan your barcode numbering schema ahead of time.

- How many digits long do you want assets to be?
- How many digits do you want your stock inventory to be?
- How many digits for the user login and passwords?
- Do you want a prefix and suffix for these codes?
- What do you want these codes to increment by?

Your vendor should have years of experience and be able to recommend a “best practice” setting based on your industry and organization’s tracking needs.



Plan for unified naming conventions

Decide ahead of time what naming convention you will use in the system. For example, if you are tracking assets such as personal computers, do you want to call a particular PC “HP PC” or “HP Innovation C1210 PC?” Once a naming convention is determined for a particular item, follow the same schema for all of the asset items in that category. The same is true for inventory naming conventions — determine a schema and then follow it for all the stock items in a particular inventory group.

Entering data into the new system

When it comes to data entry, the best possible scenario is to have an existing database or spreadsheet that includes all the inventory and assets for your organization. In this case, you should be able to simply upload the existing data to your new inventory and asset management system. If you do not have an existing database or spreadsheet, you will have to invest a significant amount of time, energy and money into doing manual data entry — which can easily result in inaccurate data entries in the new system.

For example, some companies have more than 10,000 inventory items already entered into a database. If you are one of those companies, you should not have to re-enter all of your data — just synchronize the old database with the new inventory and asset management system. Or, upload a spreadsheet into the new system that has been pre-populated with your inventory data.

Or, perhaps you are using an accounting software into which you have already entered all of your assets. If so, then simply synchronize your accounting software with the new inventory and asset management system. If the accounting software doesn’t allow for direct synchronization, export the asset data into a spreadsheet and then upload the data from that spreadsheet into the new system.





CATEGORY 3: DAILY USERS TRAINING

Now that you've done your pre-planning and preparation — and have considered all the key questions that need answering, things become very easy. The next step is to simply sit down and go through the process of learning the software with a trainer.

An example of what the trainer will teach you will include everything from how to enter assets to what you need to do to create a report. Here are a few examples.

1. For receiving a new asset: Press button A, fill in these data fields and press save.
2. To print a barcode: Go to the barcode area, choose a label, choose the asset and press print.
3. To write a report: Go to the report area, choose a report, filter the report (for a specific location, for example) and press print.

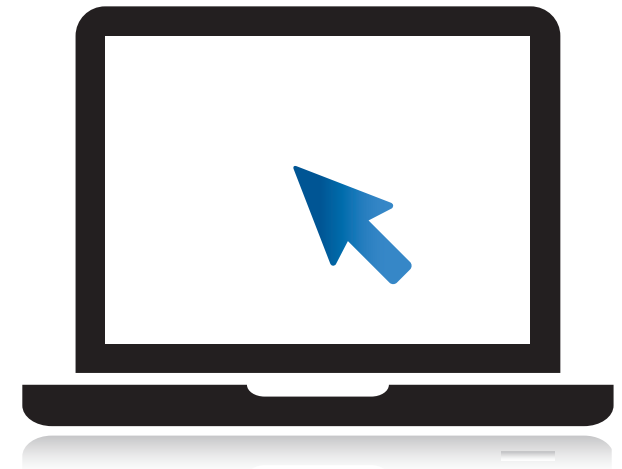
CATEGORY 4: TESTING

It is always a good idea to have a period of testing before going live with your system.

Do all your testing with a “test” database, and give yourself a minimum of two to three weeks to ensure everything works correctly. Press all the buttons, make mistakes and call your vendor for “best practice” advice.

Prove or disprove any assumptions and make sure you are comfortable with the software. Add data, conduct several transactions, view the history files, create and run reports. In other words, use the software as you would in the real world. Find out what the problems are and workout solutions with the vendor.

Once you are comfortable moving forward, set a “go live” or “a cut over” date. Before going live, though, wipe out your test database and start fresh with the actual production database you will use moving forward.



PREPARATION, INSTALLATION & TRAINING CHECKLIST



	Yes?	No?	Both?	Comments
PREPARATION				
1. Does the vendor provide installation assistance?				
2. Does the vendor provide training assistance?				
3. Have I gathered and communicated all my IT infrastructure information?				
INSTALLATION				
1. Are both the test and production databases set up?				
2. Is the client software installed on all computers?				
3. Are all the barcode printers set up and tested?				
4. Are all the barcode or RFID scanners set up and synchronized with the database?				
5. Are all my computers communicating with the database?				
TRAINING				
1. Did I configure and test the system?				
2. Did I set up all our users, location, security groups, and categories?				
3. Did I conclude training with the vendor?				
4. Did I conclude testing and wipe out the test database?				
5. What is the "go live" date? Did we meet it?				