

A Buyer's Guide for Stock Inventory and Asset Management

*What you should consider **before** purchasing a
stock inventory and asset management system*



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A Buyer's Guide for Barcode Track and Trace Systems

What you should consider **before** purchasing an Asset Management and Stock Inventory System

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.

Assets vs. Stock Inventory

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 versus your stock room or warehouse consumable stock inventory which is tracked by common stock item # or SKU identifier.

For healthcare, this can mean tracking your medical supplies, surgical equipment, wheelchairs, beds, and pharmaceutical assets. You might also need to track your hospital and clinic laptops, and various electronic equipment. Healthcare organizations should experience all of the same benefits of inventory control currently proven in the retail market.

If the stock inventory is tracked by batch, lot, or serially then a specific batch, lot, or serial barcode identifier would be used. Fixed assets, from a financial perspective, 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 small businesses seeking funding, potential lenders and banks scrutinize fixed assets very closely. This is why tracking your inventory and assets accurately are critical.



Terminology

For the purpose of this paper, 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: This is defined as "customizing" an existing feature that you can do 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.

It's Time to Automate

Along with increased time and resources, tracking manually can be costly. Lost assets, inability to track depreciation or to automate maintenance schedules can leave your inventory depleted. If you can't trace the inventory location or history of use, it can lead to supply shortage, inaccurate data and reporting, and wasted resources for data entry. Maybe there are inaccuracies with the cost tracking and you want to integrate it directly into your accounting software. Track every kind of hospital asset that's essential to patient care and clinical effectiveness, from infusion pumps to wheelchairs, telemetry transmitters to defibrillators - even patient monitoring cables.

Create Your Checklist



Whatever your business reasons are – or what your business does - it is *critical* to find the right solution that fits into your process and budget. 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 do your long range business goals fit into the vendor’s technology?

Creating Your Ecosystem: Know Your Needs from the Get-Go

The first step before talking to a vendor is to know what you need in your environment. The best way to see what the software can do is to have a live demo. Make sure you come prepared to the demo with a list of your pain points. Here are some key questions to ask yourself:

- 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 business?
- 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?
- What is my budget?

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

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– but when you probe a little deeper you will discover key differences that you will want to consider before making a purchasing decision.

The best way to evaluate a solution is through a live demo. 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 it offers. If you have needs that aren’t addressed in the demo, make sure you call the vendor or schedule a live demo so that they can address your needs directly.



The Technology

The Interface. How often does the company upgrade their software? Is it cutting edge and feature rich? What does the interface look like? In the age of mobile technology, smart phones and tablets, our expectation has changed on what our interface should look like. We expect a friendly, easy-to-use interface that looks similar to what we already use in our daily lives.

When you see the live demo, you will see either a ribbon-based, tree-based, or lifecycle-based 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. Lifecycle-based is considered *best of breed* – it is unique because it allows you to predict what the next click will be - from birth of the product to end-of-life.

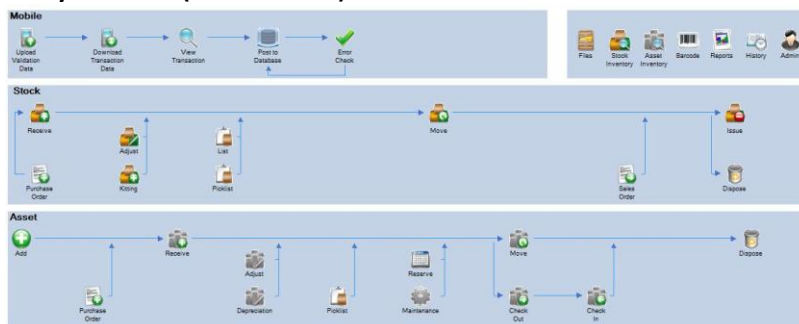
Ribbon-Based



Tree-Based



Lifecycle-Based (Best of Breed)



How flexible is the software? 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, by case, by drum, by vial... or maybe you need to receive by the case but within that case you want to show that 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? Make sure the software captures what you want to track. For example, you might need a budget code added to the “Receive” form or you might need your inventory or asset associated with a particular department.

Make sure you ask these questions before you buy. Make sure that you know what features are already included in the software, and the ones that 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 enables the software to grow and expand with your organization.

When you license a module you will also get updates and upgrades. So if you have certain future needs that aren't directly addressed in the demo make sure they have a module for that. Otherwise it might need to be built for you.

Reporting. Does the software offer unlimited, customizable reports or just a limited number of canned reports? In some instances, canned reports are fine; but if you suspect you might be adding reports, changing naming conventions, or need the ability to turn on and off data fields because they aren't needed, ask the vendor if adding these features is at no cost, billable, or can you do it yourself? 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. You might need replenishment reports to quickly determine which products are needed at each hospital, clinic and physician's office.

Barcode Tags vs. RFID Tags—What's the difference? Barcodes require line of sight. The barcode scanner must "see" the barcode. RFID depends upon a radio signal thus line of sight is not required. Because of this, RFID can read multiple tags instantly, so it can gather data faster than barcodes that are always read one at a time. Usually the choice between using barcodes versus RFID comes down to cost and efficiency. Rule of thumb is that the RFID solution is about 10x more expensive, but the payoff might be worth it... especially if a lot of your costs are tied up in manpower and fixing inaccuracies.

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 Code 39 and Code 128. 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. Code 128 is a higher density symbology that includes the full 128 ASCII character set that allows lowercase letters and additional characters.

2D (Two Dimensional) Barcodes. You may have stumbled upon the "latest and greatest" barcode technology in your research. 2D allows for holding a considerable amount of data and is ideal for companies that are tracking and moving data between different organizations and need the data to be passed along in the barcode instead of passing 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?



1D Code 39



1D Code 128



2D Datamatrix



RFID

Accounting Software integration

QuickBooks™ software is great for accounting. In fact, almost 90% of small and medium businesses use QuickBooks for their accounting purposes. If this is the case for you, you want to make sure that 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. However, 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?
 - a. Stock Item #s
 - b. 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 back-end (shipping) activities such as:
 - a. Customers jobs
 - b. Sales orders
 - c. 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 the additional barcode scanner hardware and barcode label printer hardware separately. But if you want to buy everything at once – and not have to spend more time looking, 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 want to ensure that 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 set-up? Are they able to share what they've learned from other similar customers that could speed up your learning curve?

24x7 Support. Although some vendors might claim 24/7 support, it's important to find out what exactly is offered. If you need support at 3:00 am, is it going to be from a live person, automated, or 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 3 hours?

Installation and Training. One of the biggest nightmares about a tracking system, *no matter who you buy it from*, is the installation. Even if you are buying the best solution out there it's still going to be challenging because there are 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
- Admin 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

Each company is different. You have your own security policy, your own firewalls, your own network, different routers, etc. Is the vendor going to assist with the install or are you and your IT staff all alone? Ideally, you want a vendor there with you with a minimal drain on your IT resources.

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



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 – this can be a great solution. Easy to install and typically the least expensive at initial purchase. (see chart below) However, it's important to know what you need today and what you will need 3 or 6 months from now. 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. Often it can 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”, your company might call it “Item ID”.

Custom – if you have a large deployment with very specific requirements, a custom solution might be the right choice. Custom solutions tend to have long development and implementation cycles and are costly. (See chart below.)

Configurable - There are systems that address both the benefits of an Out-of-the-Box solution and large-scale custom solutions. Such systems are your best bet and the way of the future. Usually these systems allow you to customize the data collection fields, configure, modify and create unlimited reports. You can mold these systems to fit your organizations culture and way of tracking because by the time it's all said and done, users are looking at terminologies that 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. The short and long-term cost of ownership is always lower for these systems. (see chart below)

Decoding Hidden Costs

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 might have 50 employees of which 20 might only need to view or print reports; 10 others are daily users, however those 10 are split into 2 shifts. Make sure you are only paying for 5 licenses because at any given time, only 5 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.

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?

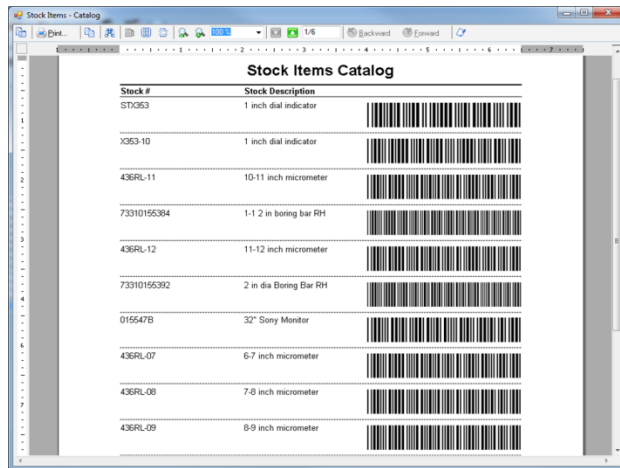
Can you configure the barcode labels or is there an additional charge for that?



Basic Barcode Label

Custom Barcode Label

Does the vendor offer a Barcode Catalog with item or stock number, description and image so it's a list to scan? This can sometimes be 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 new people. People change jobs frequently. And 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?

Below is a snapshot of the true short and long-term costs of the three types of solutions mentioned in this eBook. The dollar figures you will see in this chart below are hypothetical and are designed to illustrate the point that this eBook is trying to make.

Short and Long-Term Costs

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 <i>will fit</i> is going to cost you an average \$195/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	\$7,000.00	\$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, rename data collection fields You create, configure, and adjust your own reports You set your own security rules On a user level, folks display data that’s relevant to their jobs And the list goes on

Summary

Buying an inventory and asset management system is an important investment. Make sure you do your due diligence upfront so that the solution you choose fits your needs today, the next 3- 6 months and for the next 5 years. 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 is the product going to cost you today, 3 months and 6 months from now.

Don’t take our word for it. Check for yourself!



25 top things to check off when looking for a Stock Inventory and Asset Management System

		Yes	No	Both	Cost	Comments
Basic Needs - Creating Your Ecosystem						
1	Am I tracking any unique items? (i.e. capital assets, tools, people, office equipment, etc.)					
2	Am I tracking quantity-based items? (i.e. inventory, supplies, etc.)					
3	Are my quantity –based items serialized, lot-based, or batch-based?					
4	Besides common movements, do I need to check items in/out with due dates for return?					
5	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.)					
Vendor Evaluation - Is It a Good Fit?						
1	Do they offer live demos?					
2	What type of support packages do they offer?					
3	Is there a guaranteed resolution time turnaround?					
4	Do they charge for additional training?					
5	Is it required to use your own IT resources to install and use the software?					
Software Evaluation/Architecture - How Will It Work in Your Environment?						
1	Is the interface easy to use?					
2	Is it a ribbon, tree or lifecycle-based interface?					
3	Is the software modular-based? (i.e. no need for paid customizations)					
4	Does it work with both barcodes and/or RFID scanning if you need it to?					
5	Are you able to configure it to the way you track? (i.e. renaming, adding or hiding data-collection fields)					
6	Is it client/server architecture?					
7	Is it cloud-based?					
8	Do they only offer fixed reports?					
9	Does it Integrate with QuickBooks™?					
10	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?)					
The True Cost of Ownership - What Is Included Now and What Do You Have to Pay for Later?						
1	Is it an Out-of-the-Box solution?					
2	Fully customized?					
3	If you need to add, modify or edit your reports at a later time, will it cost extra?					
4	Is pricing based on: concurrent users, total users, or total install?					
5	Does this vendor match my needs and budget?					