

THE
BarCodeTM
NEWS

BARCODE
scanning

what every e-commerce
store needs to know

INVENTORY
control

of liquor

THERMAL PAPER
shortage

essential information
for retailers

ENTERPRISE LABEL
management

understanding and
implementing it

...and more



BARCODE SCANNING: What Every Ecommerce Store Needs to Know

By Nick Maglosky, CEO, [Ecomdash](#)

Part of the beauty of ecommerce is trading in the old ways for newer, more efficient ones. That makes it somewhat surprising, then, that barcode scanners of the past have found a new life in the today's world.

Developed in the late 1960s, barcode scanning was not universally adopted until the 80s, once its usefulness was proven and the conspiracy theorists quieted down. But with early ecommerce, barcodes didn't seem to fit in – customers no longer handed products to cashier, and expediting checkout lines was no longer a concern. Finally, the rise of smartphones allowed for a new and more convenient method of scanning, and barcodes earned their place in ecommerce alongside their sister technology, QR codes.

But the real question is, can QR and barcode scanning help your ecommerce business? The short answer is “yes,” but below we go into details on how scanning technology can improve any online store, including yours.

What Is Barcode Scanning?

Technically speaking, a barcode is a compressed representation of data, particularly the item and its price. Specialized optics-based machines can “read” the data in an instant, saving time on inventory management and in-store checkouts.

After barcode scanner technology showed promising results – raising sales by an average of 10-12% circa the 1970s – it became widely adopted. It wasn't until the 1990s that the technology was improved upon, when Japanese company Denso Wave found a way to store even more data in a limited space: the QR code.

In terms of data types, barcodes are one-dimensional and are read linearly, whereas QR codes are two-dimensional and can be read horizontally and vertically. This provides exponentially more space for data; barcodes can contain at most 20 characters of data, while QR codes can store up to 7,100 characters of data.

Regardless of whether you use barcodes or QR codes, the core principle is the same. Scannable codes allow for the instantaneous transfer of data, making organization and re-

cord-keeping that much more efficient.

That's how it started out, but scanning tech is still evolving even today. Once smartphone technology passed a certain point, it allowed virtually everyone to have a scan reader right in their pockets. (The new iOS 11 even has a native QR reader built in.) This most recent advancement has led to more ways for barcodes to improve businesses, including more creative marketing strategies.

What Can Scanning Do for Ecommerce?

Sure, ecommerce doesn't need to worry about rapidly processing a checkout line full of people. But the capability to transfer data instantly still has plenty of other uses. Here is a list of just a few ways to use barcodes. (Continued on next page)

Inventory Management

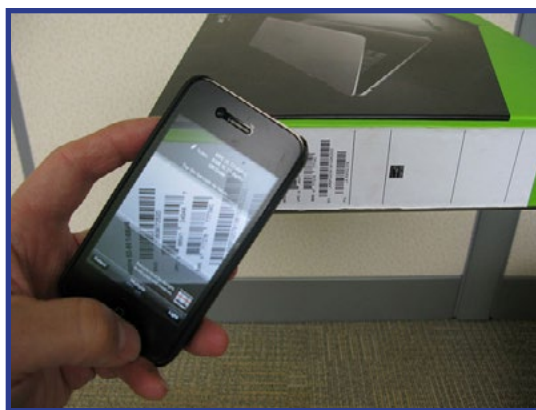
One of the backbones of scanning technology is how much easier it makes managing your inventory. Everything is automated, aside from physically holding the scanner up to the



printed barcode. This is a huge help for brick-and-mortar stores, but is even more useful for online stores. For starters, ecommerce companies deal heavily with warehouses and shipping centers, which can get confusing when consolidating information across multiple locations. Scannable codes ensure your inventory always gets replenished before running out. But more than that, scanning tech can help update inventory levels online. No customer likes being told their product is out of stock after they order it, so any lag time for updating online stock levels is a risk. Enabling a scannable system helps track what's available and what's not, so your customers know when a product is unavailable before they get their hopes up.

Order Fulfillment

Barcodes and QR codes make for faster and more accurate package tracking, an essential for ecommerce. As online shopping matures, customers place more emphasis on tracking their package to check if the delivery is on schedule. Barcodes and QR codes make this easier for retailers like you to prevent lost packages and slow delivery times. USPS now offer Shipment Confirmation Acceptance Notice (SCAN) forms which consolidates all shipping and tracking information into one master barcode. This speeds the scanning process for USPS workers and eliminates the chances of missed packages.



It doesn't matter how good you are at math; a computer is always better. That's the thinking in automating processes like shipping: remove human error for more efficiency. In addition to being faster, scanning is also more accurate, greatly reducing the chances of delivery mistakes.

Redirecting In-store Shoppers to Online Stores

One of the more interesting byproducts of smartphones is how they changed in-store shopping. A 2015 SessionM study examined the shopping habits of 12,000 Americans for some surprising revelations:

- 90% of shoppers use their smartphones while shopping in brick-and-mortar stores.
- 54% use smartphones for price comparisons.
- 42% check reviews online.
- 48% look up additional product information.

This holds a lot of hope for ecommerce stores, who receive an extra opportunity to win over shoppers before they reach the cashier. With scannable codes, the chances are even higher,

especially if you manufacture the product yourself and can add your own code to the package. The SessionM study also showed that the most relevant use for scannable codes is coupons/deals. While not applicable to every ecommerce company, if you have some of your products on shelves, a scannable code could be a powerful marketing technique, and may even attract some business for your online store.

Marketing Efforts

Scannable codes can be used for creative, outside-the-box marketing campaigns (QR codes more than barcodes). While QR codes' heyday of the early 2010s is over, in the right hands this practical technology can still be put to good use. Here are a few key pointers to keep in mind:

1. Be Subtle

Oversaturation caused QR codes to fall out of vogue the first time, so it's best to not make the same mistake twice. Nowadays, QR code marketing should be done conservatively and in moderation. That means you should limit the number of places you put a QR code, and when it does appear it should be small and discreet. Think of it as an option for those who want it, without forcing its use on those who don't.

2. Try Social Media

Social media and QR codes go hand-in-hand, and some sources even credit Snapchat for reviving the tech, or at least saving it from extinction. Above we mentioned how successful scannable codes are with coupons and sales deals, an area at which social media also inherently excels. Combining the two just makes sense.

3. Monitor progress

Monitor the analytics to see how many scans your QR code is getting — after all, immediate data is one of the perks of code scanning. If performance fails to meet projections, rework your strategy for the next iteration.

Conclusion: Old Tech Given New Life

The ability to transfer data quickly will always be useful, regardless of whether you're shopping online or in a store. The real question is whether you're using the best, most up-to-date methods. Recent advancements with barcode scanning has led to many cutting edge ecommerce technologies that make our lives easier, from multichannel inventory syncing to streamlined shipping management; but there will always be plenty of room left over for that beeping red light of our childhood.



Inventory Control OF LIQUOR

by Bo Ransdell, [DCR POS](#)

Liquor is big business for restaurants. According to one report, alcohol sales make up 18% - 20% of sales across the industry. The margins on liquor sales are always higher than the relatively slim margins on food sales, so more locations are exploring opportunities in liquor sales (even Shoney's has a beer menu now!), while those already enjoying the revenue of beer, wine and liquor are looking to emphasize their returns. Considering how profitable alcohol sales are in comparison to standard food sales, the issue is not whether alcohol sales are revenue-generating, but how does one account for liquor inventory in frequently high-volume bars and restaurants?

The old methods of inventory management are well-known. One has a list of items, tours their storage areas, and counts their on-hand items. When contrasted with sales and the expected subtractions from inventory for customer checks, that is the count. Liquor, though, is more challenging. Where the profits are highest, there is always greater threat of theft, or simply miscalculating the alcohol usage in such a manner that suggests theft or spillage. Simply marking bottles with a grease pen or 'guesstimating' amounts remaining in opened bottles is imprecise at best, and given the high potential for returns on alcohol sales, proper and reliable inventory of these items is critical.

There are manual constraints, such as bottle pourers which automatically cut off when a pre-set pour amount has been reached. These manual pourers are quite reliable in their measurements, and range in price from a few dollars to over \$50 for individual spouts, depending on vendor and degree of sophistication. While these devices excel in managing accurate pours,

they do nothing to prevent second pours or intentional overpouring of drinks. Bartenders and servers may be quick to equate free alcohol with higher tips, making these measured pouring devices little more than a delay in the loss of alcohol, not a preventative.

Fortunately, technology has come to the rescue! There are now a variety of offerings to more precisely track the measurement and reporting of alcohol use. Some are updates of old methods of inventory, such as the Partender app (<https://app.partender.com>), a subscription service that consumers can expect to cost approximately \$250/month. The app, available for iOS and Android, uses digital representations of bottles to create usage levels, much like the grease pens of old mentioned above. The real leap in terms of assistance to the consumer is the ability to set par levels and allow the app to generate purchase reports based on those levels and current reads. Of this type, other offerings like Accubar (www.accubar.com) and BevSpot (<https://www.bevspot.com>) operate using similar methods.

For those who prefer to chart more than bottle levels, other software offerings take alcohol inventory management a step further, employing the use of scales to weigh the bottles. The scale measures usage based on the weight variance from inventory period to inventory period. This provides, ostensibly, a greater degree of accuracy in the measurement of bottle volumes. Software of this type includes Barkeep (<http://www.barkeepapp.com>), which also features an online management component, and Bar-I (<http://bar-i.com>), the latter of which also boasts a service where Bar-I staff will do the weighing for you!

In most of the above applications, the focus has been on inventory tracking via app or additional software.

While there is substantial value in accurately reporting alcohol inventory, the disconnect between the users' point-of-sale system and their alcohol management can be damaging to the potential return on investment. Why spend money on an app to manage your bar sales when the savings are eaten up by the additional labor used to translate that inventory information into reporting which can enable a manager or owner to evaluate true liquor cost?

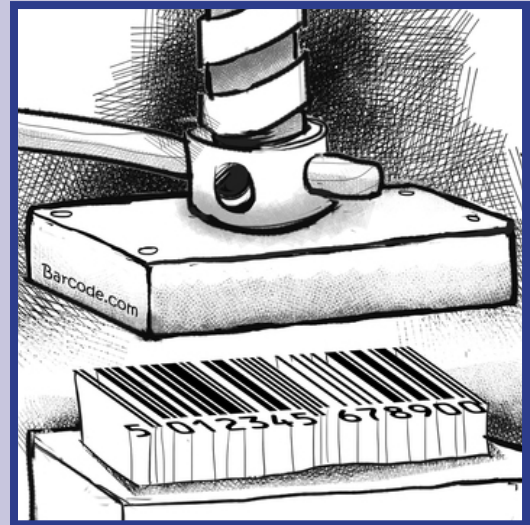
The benefits of integration with a point-of-sale system are obvious. The flow of information between the POS system and any third-party alcohol inventory application should include the easy uploading of reporting from the alcohol inventory into the POS. With this information, the point-of-sale system may weigh sales with expected inventory against the actual inventory, thus providing the variance. If the inventory count is accurate, and both the POS system and inventory management software are communicating properly, one can see how a greater degree of control may be achieved.

While there are a variety of offerings, this type of integration is key for a variety of reasons, be it labor reduction or simply a more meaningful flow of information about the business. Bevinco (<http://www.sculpturehospitality.com/bevinco>) offers a variety of integrations, along with the more enviable features of accurate digital scales and mobile management. Accubar, mentioned above, is another that integrates directly into a wide variety of point-of-sale systems. For each of these, the ability to quickly translate inventory information into the POS reporting is cost-saving and convenient.

While every business concept is different in its own way, the data indicating the importance of alcohol sales is indisputable. If your concept is offering alcohol, there is simply no reason not to include bar management software as part of a complete solution. Gaining greater control over the most lucrative revenue center in a restaurant would seem to be an easy decision, but few restaurants appreciate the significance of this revenue stream. It is up to those of us in the POS industry to provide solutions that go beyond the simple installation of POS software and hardware, and to look at custom solutions, tailored to fit the needs and revenue opportunities of each client.

MAKE A BARCODE

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CREATE BARCODE



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[Create a QR code for business cards and more](#)

Exodus of Chinese Chemical Manufacturing Leaves American Thermal Paper Market High & Dry



by Rebecca Pfeiffer, [Smith Corona](#)

If you are a manufacturer, it is tough to beat the low cost of international raw material sourcing. Countries like China, India, Indonesia, Bolivia, Brazil, Russia, and Mexico are able to offer materials at incredibly low prices because of their low labor and production costs. This is especially true if you are selling a commoditized product, such as thermal paper.

One critical component of thermal paper is leuco dye. Leuco Dye is the key ingredient in direct thermal paper, which is the paper that is commonly printed on and used for barcoding, receipts, shipping labels, airlines tickets, and much more.

As with all other raw materials of thermal paper, leuco dye production became a race to the bottom, as all manufacturers looked for the lowest possible price. Consequently,

almost all of the leuco dye production used has found its way to being manufactured in China, by only a handful of companies. These few manufacturers were simply able to offer the lowest prices and therefore drove every other major competitor out of the business.

These low prices come with a great risk, however. If any one of the manufacturers were to close unexpectedly, the market for leuco dye could suddenly become very short on supply. The recent closure of a Chinese Manufacturer, Connect Chemical, has done just that.

In early September, Connect Chemical, along with thousands of other Chinese manufacturers, were shut down by the Chinese government

because of recent changes in the country's environmental regulations. This was a part of the national effort to rectify China's infamous pollution issue.

Connect Chemical alone was responsible for 50% of the entire world's production leuco dye. In total, an estimated 80% of the world's supply of leuco dye has been halted by these newly enforced environment regulations.

After this news was announced, the prices for leuco dye skyrocketed to 5 times its normal price.

Shutting down Connect Chemical has begun to put a gigantic squeeze on the thermal paper supply chain worldwide and could have a huge impact on several different industries moving forward.

Now's the Time to Implement Domestic Sourcing

This mass shutdown in China has had a major supply chain impact, especially considering the timing of it all. The holiday season is a busy one for a lot of companies. This means increased shipping and increased consumer purchasing behavior -- If you couldn't guess...shipping labels and receipts are kind of necessary for that.

Direct thermal labels are used in barcoding, shipping, and inventory tracking. These are heat-sensitive paper labels that have leuco dye embedded in them. Once the labels pass under the heated printhead, the dye is activated, allowing the print to be seen. Many manufacturers, converters, and resellers of these direct thermal labels are struggling with this recent shortage. Most have already announced price increases.

The rapid increase of demand and lack of supply has left many companies at a loss of what to do. Many manufacturers that required leuco dye to produce their goods have either gone out of business or have been forced to drastically increase their prices on labels and receipt paper.

With this sudden closure of Connect Chemical, several of the 7 major direct thermal coaters were left scrambling to meet top coated paper demand.

Those coaters located closest to Connect Chemical were the ones most heavily impacted by the shutdown. In an attempt to stay lean, these nearby coaters were practicing just-in-time (JIT) inventory. While this was an efficient decision for the short run, it did not leave any wiggle room for any sudden drop off of supply.

Once Connect Chemical was shut down, a ripple effect was set into motion. US based thermal paper manufacturer, Appvion (formerly Appleton Papers), produced between 40-50% of all coated paper in the United States. On October 2nd, 2017, they were forced to file for Chapter 11 bankruptcy.

Appvion no longer had access to leuco dye, preventing them from manufacturing their thermal paper. Due to this, their prices have increased by 29%. If they increase their prices, label manufacturers, who use coated paper, have no choice but to increase their products as well.

South Korea-based conglomerate, Hansol Papers -- one of the world's top 7 paper coaters -- had only a 2 week

supply of leuco dye when the closure of Connect Chemical was announced.

Additionally, the global shortage has stopped several international paper coaters from taking on any new US customers.

Other direct thermal coaters, such as Mitsubishi have sent letters to their customers describing how serious the situation just might become:

"The possibility cannot be ruled out that due to this situation there may also be a production shortage or stop as of January 2018"

This was an overnight worldwide shortage of thermal paper that could not have been foreseen. So many companies could have avoided this if they had sourced domestically. Domestic sourcing allows for better inventory control -- AKA less risk -- and shorter time to market. And as an added bonus, shipping charges are much lower.

When sourcing internationally, it is crucial to be cognizant of potential -- and unfortunately common -- supply chain interruptions in the region in order to mitigate risk. These could be geopolitical or logistical barriers, such as government regulations (ex. Leuco dye manufacturers in China) or inclement weather.

If leuco dye was produced in the US by a supported company, this dire situation would have had a much smaller impact on the worldwide supply chain operations of thermal paper.

Sources:

<http://www.telemarkcorp.com/statement-appvion-10302017/>

<https://www.reuters.com/article/legal-us-appvion-bankruptcy/paper-maker-appvion-files-for-bankruptcy-idUSKCN1C71DA>

<http://www.telemarkcorp.com/paper-shortage-update-price-increases/>

0000011000006

Date:	10/2/2017	Serial number:	B198
Time:	7:32:29 AM	Aperture:	0.006"
Software Version:	2.1.0.7264 (UI)	Wavelength:	2.6E-005" (660 nm.)
	2.1.0.7264 (core)	Last Calibrated:	9/19/2017

UPC-A (implicit leading '0' removed) 0000011000006

Alert: Update Barcode Verifier Software Now

by John Nachtrieb, barcode-test.com

After many months of technical committee deliberations, the ISO committee has released an update to the ISO 15416 Standard. This impacts how 1D barcode verifiers calculate and report grading.

The importance of the update derives from the importance of this ISO specification. It's all about managing the potential risk associated with barcodes that don't perform as expected because of low quality. A brief review underscores why this is important.

Although barcode scanners also must comply with a similar performance standard—ISO15426-1 for 1D barcodes and ISO 15426-2 for 2D symbols—the several attributes to which scanners should comply have a tolerance. They will not all perform identically. Furthermore, scanners have evolved in several ways. Initially, in the days of linear-only barcodes, scanners were all laser-based. Then came linear CCD arrays, and most recently, camera-based digital scanners. This evolution also brought changes in decode algorithms, the mathematics behind how the reflective differences in the barcode images that encode the barcode data are interpreted.

Therefore, in the real world, you not only have barcodes of various levels of print quality circulating through supply chains and point-of-sale systems, you also have scanners of varying degrees of accuracy and aggressiveness attempting to read them. That is why ISO compliance barcode verification is so vital—and why a change to the verification standard is so important.

The recent update to ISO 15416 changes the way grading is calculated and reporting for the following parameters:

- Symbol Contrast (SC)
- Modulation (MOD)
- Decodability
- Defect

These are the “graded” parameters that contribute to the scan grade of a barcode. In other words, these parameters could product a grade of 0.0 (ANSI F) or 4.0 (ANSI A) or anything in between. There are also non-graded or Pass/Fail parameters that are not affected by this spec change.

Up until the recent update, the grading of the graded parameters was measured only to the lowest whole-number and its equivalent lowest ANSI letter. For example, in the old grading system, an ISO score of 2.6 for Decodability would have been rounded down to 2.0 and reported as an ANSI C. The update requires fractional (first decimal place) grading, and the 2.6 ISO score will now be reported as an ANSI B.

At first look, it seems that the update will produce consistently higher grades, and that is not necessarily true. When doing ISO- recommended 10 scan averaging the final grade could be above or below the numerical threshold for the higher or lower letter grade. What the ISO specification update really emphasizes is the importance of paying attention to the ISO numerical grade. Only this can tell you if the C grade is a high C (approaching a B), a

solid middle-of-the-road C or a low C (approaching a D).

This might seem like a hair-splitting exercise, but remember, the whole point of barcode verification is predicting barcode performance in a world of inconsistent scanner behavior and latent barcode-related liability. Fractional grading makes it easier to see subtle barcode grade migrations during a print run and to anticipate problems before they actually occur. Fractional grading makes barcode verification more accurate—and that could be an important factor in differentiating whether an apparently bad barcode is really the fault of the barcode itself or the scanner.

For those of us concerned with ISO 15415 for 2D symbols such as QR Code and Data Matrix, whole number grading will continue into the foreseeable future. A fractional grading update is not yet on the agenda, although grading is currently reported to one decimal point. Fractional grading is less of an issue with matrix codes since only one scan is taken—the ISO-recommended 10 scan protocol is not an issue with 2D symbologies.

Old whole number report:

Bar Code Test Verification Report

0000011000006			
Date:	10/2/2017	Serial number:	B198
Time:	7:32:29 AM	Aperture:	0.006"
Software Version:	2.1.0.7264 (UI) 2.1.0.7264 (core)	Wavelength:	2.6E-005" (660 nm.)
		Last Calibrated:	9/19/2017
UPC-A (implicit leading '0' remov000011000006			
Number of scans: 1			
Code Type: UPC-A 59 bars + spaces. X dim=0.013"			
Average Grade (Pass=1.5):		C (2.0) - Pass (2.0/06/660)	
Average Bar Gain (tolerance):		9% (± 30.5%)	
Magnification:		100%	
Check Character:		OK (6)	

	Pass Scans	Fail Scans
Structure	1	
Left Margin	1	
Right Margin	1	

	Percentage Values	Average Grades
Minimum Reflectance	5%	A (4.0)
Maximum Reflectance	86%	
Threshold	46%	
Symbol Contrast	80%	A (4.0)
Min. Edge Contrast	64%	A (4.0)
Modulation	80%	A (4.0)
Defects	5%	A (4.0)
Decodability	44%	C (2.0)
Decode		A (4.0)

Print Quality Standard ISO/IEC 15416, ANSI X3 182 - 1990, EN 1435, DIN 1635, BS 1435
 Symbology Specification: EN 797, ISO/IEC 15420 Verifier Conformance Standard ISO/IEC 15420-1
 Asscan Linear Verifier 2.1.0.7264
 Copyright © 1995-2015, Asscan Auto ID Limited. <http://www.asscan.co.uk>

New whole number report:

Bar Code Test Verification Report

0000011000006			
Date:	10/2/2017	Serial number:	B198
Time:	7:34:52 AM	Aperture:	0.006"
Software Version:	2.1.0.7264 (UI) 2.1.0.7264 (core)	Wavelength:	2.6E-005" (660 nm.)
		Last Calibrated:	9/19/2017
UPC-A (implicit leading '0' remov000011000006			
Number of scans: 1			
Code Type: UPC-A 59 bars + spaces. X dim=0.013"			
Average Grade (Pass=1.5):		B (2.6) - Pass (2.6/06/660)	
Average Bar Gain (tolerance):		9% (± 30.5%)	
Magnification:		100%	
Check Character:		OK (6)	

	Pass Scans	Fail Scans
Structure	1	
Left Margin	1	
Right Margin	1	

	Percentage Values	Average Grades
Minimum Reflectance	6%	A (4.0)
Maximum Reflectance	87%	
Threshold	46%	
Symbol Contrast	81%	A (4.0)
Min. Edge Contrast	64%	A (4.0)
Modulation	79%	A (4.0)
Defects	6%	A (4.0)
Decodability	44%	B (2.6)
Decode		A (4.0)

Print Quality Standard ISO/IEC 15416, ANSI X3 182 - 1990, EN 1435, DIN 1635, BS 1435
 Symbology Specification: EN 797, ISO/IEC 15420 Verifier Conformance Standard ISO/IEC 15420-1
 Asscan Linear Verifier 2.1.0.7264
 Copyright © 1995-2015, Asscan Auto ID Limited. <http://www.asscan.co.uk>

Ultimate Checklist for Retailers: Physical Inventory Counts

by Karen Wong, [ACE POS Solutions Ltd.](#)

Physical inventory is the largest asset for many businesses but especially for retailers. For a small retailer with limited resources, how inventory is managed has the greatest impact on cashflow and ultimately profitability. Physical inventory counts are one of the most tedious tasks for a business. They are expensive to run, time-consuming to do and prone to human error. But in case you're wondering why you should even care about counting your inventory, remember that businesses that don't have accurate inventory counts and valuation risk much higher operational and inventory carrying costs. In this post we will go over the best retail industry practices for physical inventory counts (FREE Downloadable Step-by-Step Checklist below) to help you prevent:

1) Inventory shrinkage - the amount of inventory lost in the course of doing business. These include everything from receiving errors and improper cashier entries to internal and external theft. The cost of shrinkage to a retail business is significant if it is not noticed as you not only lose the value of the goods (assuming they are missing), you lose the sales that could have been made from those goods. You will also be encouraging growing shrinkage if the goods were stolen as thieves will only grow ever more confident as their crimes goes undetected.

2) Over or Under Stocking as stock levels - and correspondingly safety stock levels - will be unreliable leading to missed purchase orders or too much deadstock as products are ordered at the wrong time. This may not sound important but a key driver of lost revenue is poor management of automatic re-orders. If you are using a POS, this refers to automatic reminders for you to re-order based on sell-thru and your product min/max settings. If your inventory on-hand quantities are off and your system thinks you have 9 items when you only have 3, then it will not trigger a re-order even if your safety stock level is 3. You will end up with an empty shelf and lost revenue from any customer who comes in to buy that product but ends up leaving empty-handed. Even worse, you will not re-stock that item until somebody notices the error which means it could remain out of stock for a long time or you could, hypothetically, end up with a warehouse full of boots in the summer!

Physical inventory counts should be done by retailers at the end of every reporting period (whether monthly, quarterly or annually) to detect shrinkage and prevent lost revenue.

Well-executed counts will also increase the accuracy of store inventory which leads to better cash planning through improved purchasing. In a full-feature Point-of-Sale system, you will have the ability to perform:

Full Counts which are generally performed once annually, only at the end of the financial year to provide your accountant with the value of your year-end inventory. As everything is counted (floor and storeroom inventory) during a full count, many retailers choose to close the store or conduct the count outside of normal business hours.



Partial Counts which are performed on small sections of a store throughout the year during regular business hours for inventory accuracy and to catch any anomalies. They also help to reduce the amount of work required during the annual year-end full count. Partial counts are different depending on the industry but many retailers choose to do them by store map (e.g. shoe section), by brand, by type of product, by vendor or by the importance of the products to your business. With this last option it makes sense to count the inventory items that make up most of your sales more often than your slower-moving products. With the ACE Retail point-of-sale system, you can run multiple partial counts at the same time as long as you are careful to avoid duplication (physically counting the same item more than once) as our system can accumulate counts by multiple people or devices before you finalize the entire count batch.

How to Optimize Physical Inventory Counts for Retail Stores- Now that you're ready to do an inventory count for your store, there are many things you can do to minimize the disruption to your operations and ensure it runs as smoothly as possible. Generally speaking, there are two parts to preparing for an inventory count: Pre-Count Preparation and Count-Day Best Practices.

Use an electronic scanning device to scan inventory barcodes. With new technology, you can save time and money by taking advantage of cost-effective inventory scanning software applications such as ScanNow. While it is best if all of your inventory is already barcoded, the software for your device should be able to handle multiple counting methods (manual entry, keyword search, barcode scanning) in case your staff come across items without any scannable tags. Applications such as ScanNow can even handle mobile barcode printing which is great for printing tags while counting or receiving. Make sure to check in advance that all of your devices work and that they are all charged (with extra batteries if required) before your count day.



Schedule your count when inventory is at its lowest. Try to schedule your inventory counts when you expect your stock levels to be at their lowest. This will reduce the cost and time required for your count. For many retailers this may be right after your high season such as after Boxing Day but before you bring in new stock. If you're doing partial counts, this could be seasonal products such as Halloween products at the beginning of November or summer sandals in September. NOTE: If your goal is to keep a closer eye on shrinkage, you should run random partial counts during your selling seasons so that you can respond immediately while the selling opportunity of the product you are counting is at its peak.

Don't announce your count schedule too far in advance and do random partial counts. If shrinkage is a major problem for you, don't be too predictable with your count schedule. Keep employees (and any internal thieves) guessing by doing random partial or full counts.

Quick scan of inventory condition prior to counting. Several days before your scheduled inventory count, do a quick visual scan of the inventory you expect to be counting. You will save time during the count if your floor staff prepare bulk goods, complete any in-progress assemblies or fix any missing tags or barcodes in advance.

Dispose of any defective or obsolete stock. Save on the cost and time required to count defective or obsolete inventory by disposing of it prior to the full count - e.g. returning deliveries to vendors or writing off stock.

Pre-count slow-moving products or areas. If you plan to shut down your entire operation for the count, you can speed up the full count by doing and finalizing partial counts for any slow-moving products or areas prior to the full shutdown. Remember to tag or block off these areas to avoid them being mistakenly re-counted again during the full count.

Pull and ship all inventory required to fulfill current open orders. This will minimize the chance of counting already allocated stock.

Freeze or reduce warehouse activities. Stop or minimize deliveries, transfers and assembly right before your count to minimize the chance of double-counting or omitting quantities with changing stock levels. If you have frequent deliveries or run production (or assembly) lines, it is recommended that you inform your suppliers and production supervisors of your physical count schedule so that they can better coordinate with your needs.

Complete any documents for products already delivered or shipped. Any products delivered prior to the count and included in the count should be processed as received in your POS or inventory system before you start counting. For items to be shipped, make sure they are processed and removed from your starting inventory quantities in your POS or inventory system before the count as they are already sold.

Complete any remaining inventory transactions. Make sure to finish processing any completed transactions (e.g. transfers, returns, etc.) in your POS or inventory system before you start your physical inventory count since these type of inventory movements will affect your count results.

Inform any off-site storage locations. If you use any third-party or outside storage facilities, make sure to notify them of your official count date in advance so that they can forward their count information to you on the same day.

Start Inventory Count after completing all outstanding receivings and transactions. Remember that starting the Inventory Count feature in the ACE Retail point-of-sale system will set the freeze date (the posted count inventory date). Any sales or receivings thereafter will be automatically adjusted as of the freeze date. NOTE: Please do not backdate any receiving documents entered after the inventory count has been finalized. If you have missed any receiving documents, please contact us at support@acepos-solutions.com for instructions on how to adjust for this.

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Understanding and Implementing Enterprise Label Management

by Doug Niemeyer, [TEKLYNX Americas](#)

Today, more than ever, companies of all sizes are looking to technology providers and partners to help them meet stringent label requirements and compliance standards while increasing operational efficiency. What many companies don't realize is that this can be achieved by simplifying their labeling process with enterprise label management (ELM) solutions.

Successful ELM implementations require companies to shift their labeling mindset, viewing labeling as a strategic process as opposed to a tactical one. With ELM, companies centralize label management by integrating labeling into their broader business systems. This alone is pivotal to driving a company's overall operational efficiency because it saves time while reducing errors and IT overhead.

Making the mindset shift from tactical to strategic can seem daunting, but at TEKLYNX we've learned that companies who begin with information around the basics of ELM, ELM benefits, implementation expectations, as well as what to expect in the future, position themselves to realize the benefits of ELM both in the short and long term.

ELM Basics

The simplest way to define the basics of ELM is to address five simple questions: what, why, who, when and where. "The Big Five", as TEKLYNX has defined it, helps companies better understand ELM and its benefits.

What is ELM?

ELM is made up of four primary components: 1. the ability to create and print barcode labels used for shipping, inventory, products, and more; 2. label approval, traceability, security, storage, and version control for all labels created and printed; 3. print automation to remove manual operations from the process; 4. a browser-based print interface for seamless and secure label printing locally and around the globe.

Why do businesses consider ELM?

Any form of automation can save a company money, and label printing is no exception – integrating labeling with a business system saves time and reduces errors. The centralization of label management offers many operational efficiencies while the browser-based printing interface eliminates the need for many local software installations, reducing IT overhead.

Who is the right fit for ELM?

Any company looking to consolidate, standardize, and/or centralize label management, regardless if in one location or across a global operation. Often, these companies are looking to reduce manual steps throughout the label lifecycle, meet stringent label requirements or compliance standards, and improve IT management and operational excellence.

When is the right time to consider ELM?

Four common triggers for considering ELM include: 1. lean initiatives; 2. government regulations/initiatives in labeling or process management; 3. internal initiatives to improve efficiency, reduce errors, or create more control; 4. business growth, acquisition, or expansion.

Where should a company start?

By taking the time to truly understand the benefits of ELM as they pertain to a specific company's needs. Start with the end state in mind and look to technology providers that have both resources and the customer service necessary to help.

ELM Benefits

After a company is able to truly understand ELM, it begins to see how it can drive efficiency across its processes. Successful implementation can have a cascade effect, meaning companies can realize benefits like error reduction, time savings, and cost savings across a variety of processes. For example, integrating label printing into an existing

business system takes manual steps out of the process, saving time and reducing errors. And, because integration enables automation, print speed increases while mistakes decrease.

Another efficiency exists within the ELM software solution itself because it includes built-in approval rules for label design and printing. These rules streamline processes, further reducing misprints and errors. All while centralized IT management means the end of managing individual local installs, saving additional time.

ELM Implementation

Gaining a true understanding of the ELM implementation process is as critical as understanding the basics and benefits of ELM.

Implementation is a process, and processes take time. The average timeline to implement and ELM solutions is three to four months, but this process can be lessened or lengthened dependent upon levels of approval needed to get started, staff availability, and the ability to change the company's current process.

And it's not just the timeline that varies when it comes to implementation, the actions that make up the implementation process vary as well. Leveraging decades of experience, TEKLYNX created a general outline of the ELM implementation process. Although this process varies from company to company, the outline has proven helpful as it provides companies with a general understanding of what they'll encounter. The "Eight Steps to ELM Implementation" include:

1. Discovery: Define labeling environment's current state and desired future state
2. Proposal: Develop a Customer Requirement Document (CRD) and propose a solution
3. Kick off: Company and technology solutions providers partner
4. Preparation: Prepare and install the server
5. Configuration: Configure the server and begin initial testing
6. Label Design: Complete label design work and complete solution training (including label design, approval, printing, management, admin, reporting) on label design software
7. Training: Train staff on the ELM solution
8. Roll out: Take a phased approach to roll out, one step at a time

Future of ELM

When an ELM implementation occurs, a variety of departments should be involved in the process. At minimum, this usually includes IT, Quality Assurance and Production. Given that IT maintains the system, Quality Assurance is responsible for complying with mandates and regulations, and Production becomes the main user, it's critical that these departments continue to work together beyond implementation. Strong communication among departments can help ensure the ELM system stands the test of time.

In addition to understanding the important role a company's departments play in the continued success of an ELM system, it's also important that a company truly understands its ELM technology solution provider. This means an understanding beyond product – a company should be looking for a partner, not just a technology solution. This is critical to an ELM system's future as a good partner should provide unmatched customer support along with effective technology solutions.

Information is king

Knowledge is power, but when it comes to ELM, information is king. Gathering information before implementation is critical as it helps companies look beyond a quick technology solution purchase to understanding the importance of a customer support-focused technology partner and a productive implementation process. To learn more about ELM visit teklynx.com to download TEKLYNX' Answering Your Questions about Enterprise Label Management eBook.

Doug Niemeyer, TEKLYNX Americas General Manager, is responsible for the success of TEKLYNX Americas' business, its employees and resellers, while spearheading ongoing development of industry-leading solutions to help customers successfully run their businesses.

TEKLYNX Americas is a division of TEKLYNX International SAS, a fast-growing organization with barcode label design software implementations in more than 75 percent of Fortune 500 companies throughout the world such as Nestle, Kraft Foods, Owens Corning, Rockwell Automation and Johnson Controls. Under Doug Niemeyer's leadership as General Manager, TEKLYNX has extended its reach in the enterprise market as a global leader in barcode labeling software and a provider of solutions designed to help businesses increase efficiency and streamline operations while minimizing costs and mitigating risk due to manual process errors. Doug can be contacted at: doug_niemeyer@teklynx.com

Barcode 101: For Retailers

by Inese Kushelman, [Randall Data](#)

Barcodes come in many flavors that can serve different purposes. A key to using them is also having the appropriate scanner to read the barcodes that you work with daily. Also, thinking proactively when it comes to barcode scanners. Just because you do not use that type of scanner today, is there a chance you may in the future? Would it be a good business decision to invest in a more advanced scanner now or wait until you reach that point in your business plan. Before you can decide on which scanner best meets your needs, you need a good foundation on the different barcode types. I like to call it Barcodes 101!

Barcodes fall into two main categories, one-dimensional (1D) and two-dimensional (2D). One-dimensional represent data through the widths and spacing of parallel lines and include: UPC, EAN, Code 39, CODE 93, GS1 Data Coupon, and ISBN barcodes. Two-dimensional barcodes represent data through two-dimensional shapes and symbols and can represent more data than one-dimensional barcodes. QR codes and PDF417 are a couple of examples.

One-Dimensional Barcode (1D)

UPC Codes



The most recognizable barcode type is the UPC, Universal Product Code. It is most commonly used in the retail industry. Although it is mainly used in the United States it is also used throughout the world, including: Canada, England, Australia, New Zealand, and Europe. Each number or line represents something to help determine a specific item that is linked to the UPC code. There are two types of UPC codes, UPC-A with 12 numeric digits and UPC-E the suppresses zeros in the UPC which leads to the length varying between 6-12 digits.

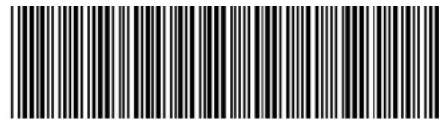
EAN code



EAN code (European Articles Numbers) is a 12 or 13-digit number uniquely identifies a product, manufacturer, and its

attributes. The EAN is very similar to the UPC except for the country code identifier in the written numbers, but the lines and width are the same. There are two different types of EAN barcodes EAN-13 and EAN-8.

CODE 39



Code 39 is widely used in the automotive industry, the department of defense, and name badges. It is variable in length. Code 39 symbology represents numbers 0-9, upper-case letters A-Z, the space character, and symbols - . \$ + %.

Code 93



CODE 93 is alphanumeric numeric code that was designed to enhance Code 39. Code 93 offers a more secure continuous symbology to provide a more secure coding. The symbology can encode 47 different characters, including: uppercase A-Z; the digits 0-9; the space character, symbols - . \$ + % /, and special characters, including the start/stop symbol. It is used for name badges, inventory, and industry, but most commonly used by the Canadian Post Office.

GS1 DataBar Coupon Format



GS1 DataBar was formally know at RSS or Reduced Space Symbology. It was developed to help provide a more concise barcode and has been widely accepted on coupons. The coupon value can be any amount up to \$999.99 and can add a more precise description to account for quantity. It has hidden data to help with fraud prevention and automated expiration data.

ISBN Barcode/EAN 5



ISBN (International Standard Book Number) uniquely identifies a commercial book or book like product such as an audio-book or card. The ISBN ranges from 10-13 digits and often is combined with EAN 5 to show the price of the book.

Two-Dimensional Barcode (2D)

QR Codes



QR Code (Quick Response) are the most recognizable of the 2D barcodes and can contain more than just a symbolic representation of an item, but can also include tracking or marketing information. They can contain 100 times more data than the 1D codes, but they can also be scanned digitally. Although you may see the QR code on an advertisement or business card, more common retail application is for entertainment and transporting ticketing. They are free to use, flexible in size and easily read.

PDF417



PDF417 are free public domain 2D codes that contain large amounts of data and have a variety of applications including identification cards, transportation, logistics (FedEX). Large amount of data can be stored securely and inexpensively. The symbology consists of several linear rows of stacked codewords representing 1 of 929 possible values in clusters.

Choosing the Right Barcode Scanner

Now that you have a general understanding of the most common barcodes used in retail, it's now time to select the correct scanner that will meet your current and future needs. There are three main categories of scanners: Laser, Linear Imager, and 2D area imagers. Once you determine the category of scanner, you will also need to determine the type of scanner that will best serve your business needs.

Scanner Categories

Laser Scanners

Laser scanners are the most common and uses a red laser to read the reflectance of the black and white spaces in a barcode. Once the barcode is read, the decoder interprets the barcode using the check digit and converts it into text. It only reads 1D barcodes but is often the most cost-effective option. They can easily be programmed using a scanner set up sheet to tell a POS system how to interpret the code in relation to the data on file.

Linear Image Scanners

Linear Image scanners are like laser scanners but instead of reading the barcode, it takes a picture of the image and interprets it. They are more effective at reading poorly printed or damaged codes. For businesses who deal with printed barcodes or deal with damaged or hard to read barcodes, linear imagers are a better option.

Omni-Directional Scanners

Omni-Direction Scanners read 1D images like laser scanners, but have additional mirrors to transform the laser line into many multi-directional lasers to make it easier to read barcodes. It is best suited for high volume POS situation, like super markets.

2D Area Scanners

2D area scanners can read any type of barcode, 1D barcodes or 2D barcodes. The 2D scanner is more intelligent than other scanners because it can read the barcode no matter what the orientation is, and off varied surfaces such as phone screens.

Scanner Categories

Most people are familiar with the gun-style scanner, but scanners fall into 4 main categories for retail: handheld, presentation scanners, mobile computing and in-counter. Each option meets different business needs and selecting the correct scanner will save you money and make you more effective.

Handheld

The most prevalent category is the handheld or gun style barcode scanner. Handheld scanners are the most popular, because they are easy to operate and are cost effective. Don't let handheld fool you, even though they are called handheld; many come equipped with stands for hands-free use.

They come in both corded and wireless. While the corded scanners are less expensive; the mobility is limited to the length of the cord. Corded scanners are historically more durable, powerful, and reliable. They are a great option if you are using them in a stationary location.

Wireless handheld scanners give you more flexibility when scanning barcodes. (continued on page 19)



barcode ART

There aren't many people who can actually say that they were the first person to ever do something that no one else has ever done before. There are even less who can say that more than once. Meet Bernard Solco, a New York City based artist who was the first painter to ever look at a barcode and say, "That's art." In the spring of 1993, Solco had an opportunity to show his artwork to a select group of serious Pop Art collectors and art critics at a private exhibit in the prestigious Soho Arts District in lower Manhattan. The artist had only two weeks to create a masterpiece that would make a lasting impression on the esteemed group.



Solco went right to work and stretched two oversized canvases but had no particular inspiration or subject in mind. Three days had passed and the artist just stared at the canvases waiting for something to appear in his mind's eye. The artist, who lived and worked in a loft, woke up the next morning and sat in his kitchen eating breakfast while looking at the empty canvases that were in the distance leaning against the wall in his studio. The loft was quite large and the studio was far enough from the kitchen that in perspective the canvases appeared to be only a few inches tall.

While pouring Hershey's Chocolate Syrup into a glass of milk

his eye immediately focused on the barcode on the back of the bottle. Serendipitously, the shape of the barcode was exactly the same shape as one of the stretched canvases in his studio. As the artist was holding up the bottle and looking at the barcode he glanced at the canvas in the distance. The idea for a giant barcode was born. Solco spent the next three days painting an impressive four foot tall Hershey's Chocolate Syrup barcode and the rest is history.

The artist not only impressed the art collectors and critics, he also sold the Hershey's painting on the spot. In addition, an art dealer invited Solco to do a solo exhibition of his giant barcodes in his New York City gallery. For the next six months, the artist painstakingly created an entire series of paintings and limited edition prints entitled, "American Product Series." The series was comprised of 20 large scale paintings and prints of American product barcodes. Several of the paintings depicted barcodes from food items that the artist himself purchased on a regular basis. Solco has united the two distinct roles of consumer and artist. Representing a range of popular products from Oreo Cookies, Kellogg's Corn Flakes, Marlboro Cigarettes, and Kodak Film. The impressive oversize paintings were precisely scaled and rendered that each painting is capable of actually being scanned. Twenty five years later, the paintings can still be scanned today by using a barcode scanner that can be downloaded to a cell phone or tablet.

Solco's American Product Series debuted in a Soho art gallery in the fall of that year. The show was a huge hit and the artist sold out the entire series except for two paintings which he decided to keep for his own collection. He has since then went on to paint more than seventy product barcodes. He went on to paint nearly as many 2D barcodes which brings us to Solco's next "first". The artist was also the first civilian to be formally introduced to new 2D barcode technology the following year. One of Solco's collectors was a barcode pioneer and prominent figure in the barcode industry. The collector purchased several paintings for the newly decorated lobby of his barcode company. Solco was introduced to other

industry insiders who gave him a private tour of a facility that was working with the Department of Defense and 2D barcode technology.

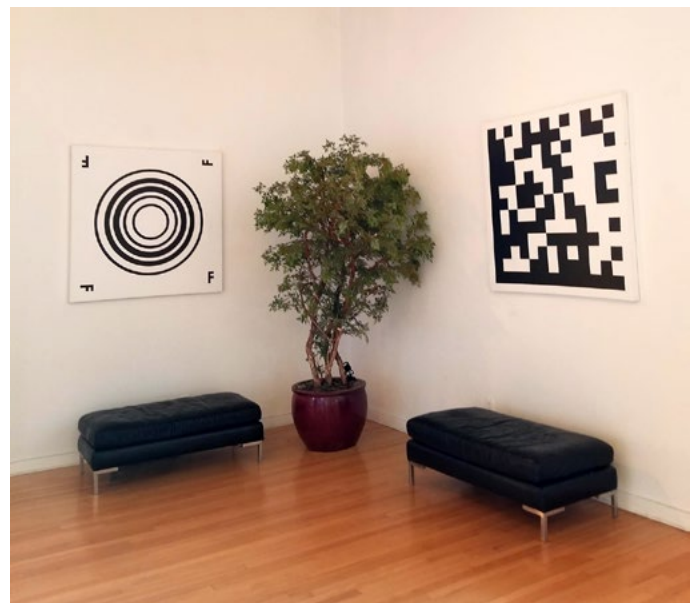
The artist was very intrigued, not only with the technology, but even more with the visual aspects of the 2D codes. The artist was again inspired, and created an entire new series of paintings and limited edition prints entitled "Symbology". The paintings and prints featured several 2D barcodes which the artist had encrypted with various messages in the artwork. One of the paintings was a six foot long PDF-417 code that was encrypted with Abraham Lincoln's Gettysburg Address. Bernard Solco's incredible 2D barcode paintings rewarded him with the distinct honor of creating the world's first talking paintings. Solco's paintings and prints have been acquired by private and corporate collectors such as Zebra, Symbol Technology,

While a good percentage of the artists portfolio consists of paintings focusing on information technology, the artist has also made a name for himself as a celebrity portrait painter. Solco has been commissioned to paint portraits for some of the world's most famous celebrities and prominent world figures including actress Brook Shields, NYC Mayor Rudy Giuliani, boxing legend Muhammad Ali, President Donald Trump and many others. His unique style of portraits penetrate deep into the core of each person he paints creating the effect that the portrait is somehow alive. One of Solco's crowning achievements was painting a portrait of the father of the barcode himself, Joe Woodland. Solco was commissioned to paint Dr. Woodlands portrait, and in October 1999 had the honor of presenting the portrait to Dr. Woodland on the 50th Anniversary of the invention of the barcode patented by Dr. Woodland in October 1949. To commemorate the event, the artist also created a unique series of 49 limited edition serigraph prints depicting the very first barcode. Dr. Woodland also signed the series. There are still a few prints available in the suite and can be acquired on the artist's website.

Although the artist works with celebrities he also paints individuals and families from every walk of life. The artist has a Facebook page where he regularly posts photos of his work. He welcomes friend requests especially from anyone who loves barcodes! <https://www.facebook.com/bsolco>

Bernard Solco's paintings, prints and portraits are surprisingly affordable and can be shipped worldwide. Please visit his website at: <http://www.bernardsolco.com>

Images: left, Bernard Solco and the inventor of the barcode, Joe Woodland. circa 1999; right top, Bernard Solco paints a 5x6 foot Kellogg's Corn Flakes barcode. circa 1993; right middle, Bernard Solco's paintings of a 1950's Bullseye barcode & a Data Matrix barcode. circa 1995; right bottom, Bernard Solco's giant Marlboro Menthol Cigarette barcode. circa 1994



TEKLYNX International

TEKLYNX International is the world's leading developer of barcode labeling software solutions. Their products feature the widest range of device and driver support in the industry. More than 600,000 companies in 120 countries rely on TEKLYNX integrated software solutions for supply chain automation, warehouse management, shipping and receiving, inventory control, and asset management.



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Barcode 101 / Continued from page 15

The scanner communicates with the base, which transmits the information back to the POS workstation. Although it is mobile you must stay within the range of your base for it to be functional, but some top-end wireless handheld scanners have a range up to 50 feet!

Presentation Scanners (counter-top)

Presentation Scanners are stationary, and the items are passed in front of the scanner allowing for hands-free scanning. They are omni-directional and allow for a faster and easier reading, with a less precise scan. In the market today are presentation scanners that can read 1D and 2D barcodes. They are ideal for retailers who need a cost effective and reliable solution. Another advantage is that they can read 2D barcodes on mobile device screens, for electronic coupons, tickets, or boarding passes.

Mobile Computing

Mobile computing takes scanners to the next level because they not only scan the items, but they also connect back to the main database for sales transactions or inventory management. The mobile computing option gives you more freedom because the PC and scanner is integrated and goes with you; unlike other categories that either are attached or must be in range of a POS workstation. Mobile computing scanners are often made more durable because, they are designed to move around which can increase the risk of dropping the device. They are more expensive than their counterpart, because they combine both the computer and the scanner in one device.

In-counter

These scanners are made to be mounted in the countertop and well suited for high-volume retail situations. To scan an item, you simply place the barcode face down on the scanner versus passing it in front of the omni-directional laser scanner. They provide a clutter-free workspace and boast a faster read rate than their counterparts. You also have the option of having an integrated scale, which makes them an ideal for grocers and other retailers that sell weighed items.

Understanding your options is critical in the retail industry. With technology constantly evolving, it is important to keep up with the products that will help save you time and drive more revenue. As always, take your time, know what your goals and select the right product to help you meet those goals.

BARCODE RESOURCES

HISTORY OF BARCODES



The bar code, also referred to as a UPC (Universal Product Code), although that is just one type of bar code, was invented for inventory tracking purposes in stores. [Learn more >>](#)

ALL ABOUT 1D BARCODES



Have you ever looked at the black and white symbol on your grocery product packaging, or on the cover of a book that you just bought or even a department store receipt and wondered how the information is encoded in those bars and spaces? [Read more >>](#)

HOW TO GET A BARCODE



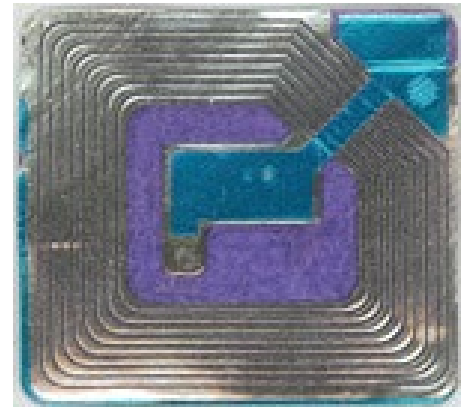
So, you have a product, and you want to be able to sell it through retailers. Now you're wondering how to get a bar code, or more specifically, a Universal Product Code (UPC). [How to get a barcode >>](#)

HOW TO CHOOSE A BAR-CODE READER OR BAR-CODE SCANNER



There are many considerations when choosing a type of bar-code reader or scanner. [Learn more >>](#)

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THANK YOU TO OUR CONTRIBUTORS

NICK MAGLOSKY CEO, [Ecomdash](#) | article page 2

Nick Maglosky is CEO of Ecomdash, a leading full-cycle inventory management platform designed and built to empower e-commerce entrepreneurs looking to expand their business to multiple channels and beyond. Nick is passionate about small to mid-sized businesses and all things e-commerce, and hopes one day the Cleveland Browns will win a championship.



BO RANSELL [DCR POS](#) | article page 4

Bo Ransdell has worked in the service industry for almost thirty years, and with DCR for more than a decade. As a leading reseller in the Southeast, DCR is committed to finding innovative solutions in the ever-changing point-of-sale landscape.

REBECCA PFEIFFER [Smith Corona](#) | article page 6

Rebecca Pfeiffer works as a marketing specialist at Smith Corona Labels & Ribbons, a start-to-finish US manufacturer of thermal labels. She has been in the barcoding industry for almost 2 years.

JOHN NACHTRIEB [barcode-test.com](#) | article page 8

Mr. Nachtrieb has 30+ years of hands-on experience in barcode technology. His team imaged the film master for the first commercially scanned barcode in North America (1974). His specialty is barcode quality. He created and hosts a highly customized barcode quality seminar which has been presented to 100's of companies, reaching thousands of quality-concerned people, helping them to avoid barcode problems and manage barcode-related risk.



KAREN WONG [Ace POS Solutions Ltd.](#) | article page 10

Karen Wong is a business strategist and thought-leader on marketing, operations innovation and multi-channel growth. An avid entrepreneur, Karen has run a number of ventures in Canada and East Asia – from a distribution company to a baking studio. As the founder of ACE POS Solutions Ltd., her passion is steering businesses to greater success, particularly turning around under-performing operations.



DOUG NIEMEYER [TEKLYNX Americas](#) | article page 12

Doug Niemeyer, TEKLYNX Americas General Manager, is responsible for the success of TEKLYNX Americas' business, its employees and resellers, while spearheading ongoing development of industry-leading solutions to help customers successfully run their businesses.



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*Craig L Aberle
Owner, publisher and bar code fan*

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BlueStarInc.com (KY and worldwide offices) - assorted - business development, sales, warehouse - <http://www.bluestarinc.com/nl-de/about-bluestar/careers.html>

Zebra (IL, GA, CA, MO, NY, RI and others) (about 60 openings posted) - <https://www.zebra.com/us/en/about-zebra/work/careers.html>

GS1 - <http://www.gs1.org/careers>

Sato America (IL, NC, NJ, CT, others) - <https://www.satoamerica.com/careers.aspx>

Honeywell, Intermecc (world wide - over 3,000 job openings posted) - <http://www.careersathoneywell.com/en/job-search-results/>

Motorola Solutions (world wide - over 260 jobs posted) - <http://careers.motorolasolutions.com/>

Barcoding, Inc - (MD, GA, OH, MN, KY, MA, MI) - http://www.barcoding.com/about/barcode_employment.shtml

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