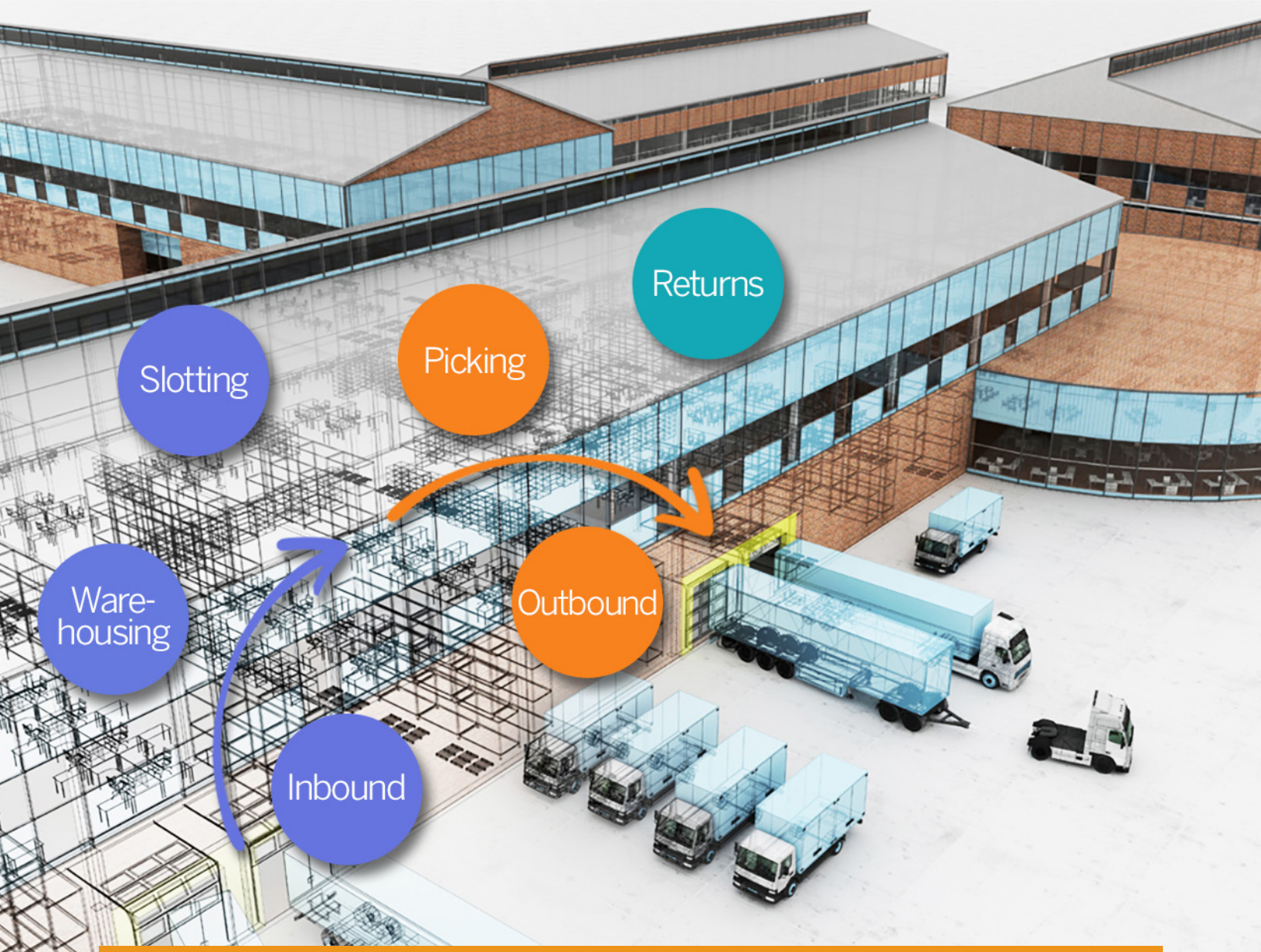# Getting the most from your dimensioning investment

With warehouse space becoming ever more valuable, every cubic foot counts. Gone are the days when seat-of-the-pants space management and a tape measure got you by. Add to that the recent introduction of dimension-based shipping rates by FedEx, UPS and other carriers – which leaves many businesses struggling to control costs, calculate accurate rates for their online customers, or even to audit shipping invoices.

That one-two punch has many DC and warehouse managers putting "get a dimensioning system" on their to-do list. As you consider investing in a new system, it's important to select one that can help you leverage all the potential benefits of dimensioning – today and in the future.

Slotting

Picking

Returns

Ware-housing

Outbound

Inbound

WHERE TO BEGIN

Basic dimensioning hardware has been available for some time, though much of it was developed when dimensioning was just a niche market, and the demand for speed and capability was not as great as it is in modern logistics, distribution and e-commerce settings. As a result, dimensioning technology is undergoing a rapid evolution – with some solutions far ahead of the pack.

The optimal system for your facility will depend on your slotting and shipping volume, the size and types of items in your stream, and the level of investment you want to make. Options run the gamut from labor-intensive tabletop units to expensive tunnels that require significant buildout. In-between is an emerging class of solutions that offer the advantages of a small footprint, but – by using the latest sonar and optical technologies – are packed with speed and capabilities older devices could only dream of.

10 essentials to look for in a dimensioning system

1: SPEED

First and foremost: how fast is it? Time is money. A system that requires 3, 5 or even 7 seconds will be a bottleneck on your line. It becomes an even bigger issue for warehouses looking to jumpstart their dimensioning program by scanning every in-stock SKU. Look for a system that dimensions items in under a second.

2: ACCURACY

Dimensions should be accurate within 0.25 inches, and certified as legal-for-trade.

3: ANY SHAPE

The package stream is trending towards more irregular-shaped and unboxed items. Select a dimensioning tool that can measure any item – polybags, tubes, bundles, any shape at all. You'll avoid set-asides that require costly manual intervention. You'll also eliminate surprise chargebacks from your carrier. (Plus: many irregular items are almost impossible to measure manually!)

4: INSTALLATION FLEXIBILITY

Quick-setup, "plug-and-play" systems cost much less to install and maintain. Select a system that mounts anywhere, without disrupting your existing line or requiring costly assembly or buildout.

5: ALIGNMENT-FREE

This is a critical aspect of the actual, effective speed of a device that is often overlooked. Pick a system that doesn't require the careful placement or alignment of items, which wastes time and causes errors. The best systems have a "field of view" and can dimension anything, in any orientation, within it.

6: AUTOMATIC SCANNING

Another important component of speed. Many devices require that the operator place an item, then hit a button and "stand back." These small steps add up and are real productivity killers. Choose a system that detects a new item automatically, and scans instantly.

7: A PHOTO OF EVERY ITEM

Built-in imaging is fast-becoming a "must-have" in dimensioning hardware. Photos virtually eliminate picking errors, confirm item condition upon arrival at (or shipment from) your facility, and are invaulable for tracking and claim protection. One shipper we interviewed uses images to reduce loss of high-value items throughout his stream.

8: STATE-OF-THE-ART DATA OUTPUT

Avoid proprietary connection protocols, which invariably lead to cost and complexity. The gold standard is XML-based API integration – the simplest and most widely-accepted approach for many types of advanced technology. Some devices also come pre-configured for connection with popular shipping programs.

9: COMPLETE DATA CAPTURE

The most advanced dimensioning systems support scanning complete item data, including barcodes and OCR (text recognition). In certain installations, this is an invaluable productivity booster.

10: CENTRALIZED FLEET MANAGEMENT

If you expect to deploy more than a single unit, it's important to choose a system that supports "dashboard-based" monitoring and provisioning, including automated firmware updating and routine device "health checks." That will keep your system operating at its most productive, and enable you to get the most from your investment.

Cloud

Software provisioning and hardware monitoring

Dimensioning devices

WMS or shipping software

Higher warehouse & truck density

Load prediction, optimized carrier mix contract negotiation

Throughput monitoring & load balancing

11: CLOUD CONNECTIVITY

Okay, we said "10 things" – but this is this is one of the most exciting areas of development in dimensioning, so we couldn't leave it out. Choose a device that offers Cloud integration. Much more than just a buzzword, a Cloud connection means you'll have a permanent record of all the data scanned from your stream – which is then available for analysis to generate operational insights across your operation. The sky's the limit. Even small facilities will generate enough data that Cloud integration is imperative.

Cloud connectivity is one of the most exciting areas of development in dimensioning. Even small facilities generate enough data that Cloud integration is imperative.

The dimensioning advantage

Inbound...

The right dimensioning equipment will give you total mastery of every square foot of your warehouse, and improve operations across your entire supply chain.

SPACE OPTIMIZATION

For many warehouses, expansion isn't an option. In some markets, lack of warehouse space is a serious problem. One example: Industrial & Logistics Market Report predicts the UK will run out of warehouse space by 2020. Dimensioning data extends the life of a warehouse – and increases profitability – by using available space more efficiently.

SLOTTING

Slotting can't be optimized using pick rates alone; dimensional data must be part of the equation. Plus, with dimension information in your system, you'll be able to automatically assign items to their proper storage system (pallet racks vs. bin shelving).

Example:
A stretch of warehouse shelf can hold one large item – picked 1000 times/year – or five smaller items, each picked 400 times/year. Rank by pick rate alone, and you'll put the larger item in that slot. With dimensioning integrated in your system, you'll automatically detect a better opportunity: place the smaller items, and double your efficiency (400 x 5 = 2000 picks.)

Outbound...

Dimensioning systems placed on outbound streams are powerful tools for cost containment and overall efficiency.

REDUCE SHIPPING COSTS

Since the dawn of time, shipping costs have been based on weight. No longer. Carriers are switching to dimension-based pricing. And in case you hadn't noticed, they're using the "black box" of those dimensional-weight calculations to increase your overall spend.

Dimensioning restores your ability to anticipate and control costs, and to audit shipping invoices. Another big benefit: Being able to quote accurate shipping charges for your online customers, in real time.

In case you hadn't noticed, carriers are using the "black box" of dimensional-weight calculations to increase your overall spend.

RATE SHOPPING AND INFORMED NEGOTIATIONS

With dimensioning on board, you'll know exactly what's in your stream. You'll be able to compare rates to find the best carrier mix for your precise situation, and be better-informed when it's time to negotiate contracts.

PRE-MANIFESTING

Pre-printing packing lists and shipping labels eliminates double handling for more efficient throughput. Without dimensional data for every SKU in the system, it can't happen.

... and all-around

PICK/PACK EFFICIENCY

With dimensional data in the system, pick lists can be used to pre-select the correct box size, so pickers can place items directly into the shipping box – eliminating two steps and trimming the use of corrugated and void fill. In addition, the trend towards made-to-measure packaging systems requires the availability of accurate dimensional data.

Even better: with an image of each item (taken from inbound scans) on the pick list, picking errors drop from a reported 4% to virtually none.

ITEM TRACKING

Dimensioning systems that also capture an image (as well as OCR and barcode data) can automatically track items as they travel throughout your operation, without impacting throughput. Tracking information aids lost item retrieval and images reduce transport damage claims.

LABOR COSTS

Automated dimensioning systems are clearly more cost-effective – and far more accurate – than manual measurement. Some companies report a 90% reduction in line labor as well as increased throughput after introducing automated dimensioning.

RETURNS

Incorporating a dimensioning system with image capture streamlines the returns process. The image confirms the item and package condition and the returned items can be restored to available stock immediately.

DATA ANALYSIS

Dimensioning systems create data. Harvesting and analyzing that data yields one of dimensioning's greatest benefits: the ability to find efficiencies that are not immediately obvious. Capacity optimization, load balancing, eliminating bottlenecks – whatever operational metric is required.

Some companies report a 90% reduction in line labor as well as increased throughput after introducing automated dimensioning.

A case of award-winning success

Because state-of-the-art dimensioning systems positively impact so many different aspects of warehouse operations, payback on investment can occur in just a few weeks. That was Cascade Orthopedic Supply's experience. Cascade is the largest independent prosthetics distributor in the country – a high-volume distribution network spread across the US and Canada, with more than 250,000 SKUs.

DIMENSIONING SOLUTION
PARCEL FORUM GAME CHANGER OF THE YEAR 2016

Why dimensioning?

Jeff Collins, President of Cascade – and a known innovator – said there were several drivers behind their move to automated dimensioning. First and foremost was the need to "keep our carriers honest" by auditing dimension-based shipping invoices. But the opportunities go much further than that; Cascade chose QubeVu to capture every SKU in their inventory, as well as to dimension both inbound and outbound lines. In fact, Jeff sees QubeVu as being instrumental to their competitiveness.

Why QubeVu?

After reviewing several dimensioning systems, Jeff says QubeVu was an easy choice. He was immediately impressed by QubeVu's speed, accuracy and ease of use – even for unusually shaped objects shipped loose or in polybags, like walking boots or leg braces.

Compared to QubeVu, competitive units seemed "cumbersome and costly – both acquiring and maintaining them." His instincts have been proven correct: "We know QubeVu is going to help us achieve our goals."

QubeVu collaborated closely with Cascade's WMS provider, PathGuide, to integrate complete dimensioning data into the Pathguide Latitude WMS system. Warehouse space optimization began immediately with product slotting. The WMS combined pick rates with dimensions to optimize productivity and give Cascade a higher yield on its existing warehouses.

Here are some of the other ways Cascade is integrating QubeVu:

INBOUND
• Dimensioning and imaging every inbound SKU for total dimensional management
• Imaging used to identify SKUs that need to be rescanned due to a change in packaging

> "Other options are cumbersome and costly. QubeVu is fast, it's accurate – I absolutely recommend it."
>
> JEFF COLLINS
> PRESIDENT
> CASCADE

PICK/PACK

- Using QubeVu's image to confirm correct the item is picked
- Using dimensional data to pre-select the correct-sized carton, which can then be picked into directly

SALES

- Quoting accurate freight charges in real time to online customers

OUTBOUND

- Choosing the optimal carrier for the dimensional-weight charge of each parcel
- Auditing shipping invoices and "keeping carriers honest"
- Using imaging to protect against fraudulent insurance claims

A winning solution

Because QubeVu embodies the very best of dimensioning technology in a compact and cost-effective package, the sky's the limit. That's why CB Insights said QubeVu will "transform warehousing."

Cascade's implementation of QubeVu's dimensioning solution and PathGuide's WMS was recognized with the PARCEL Forum's prestigious 2016 Game Changer of the Year Award. Cascade earned the award for its successful implementation of a significant innovation that resulted in measurable savings, enhanced productivity, and other benefits to improve shipping and distribution operations.

You can win with QubeVu, too.

QubeVu

- Increase productivity
- Improve accuracy and consistency
- Advanced automation of warehouses via IOT applications
- Enhance speed and throughput
- Optimize warehouse space
- Increase transparency and promote better planning
- Quote dynamic shipping rates for ecommerce
- Reconciliation of charges

www.qubevu.com