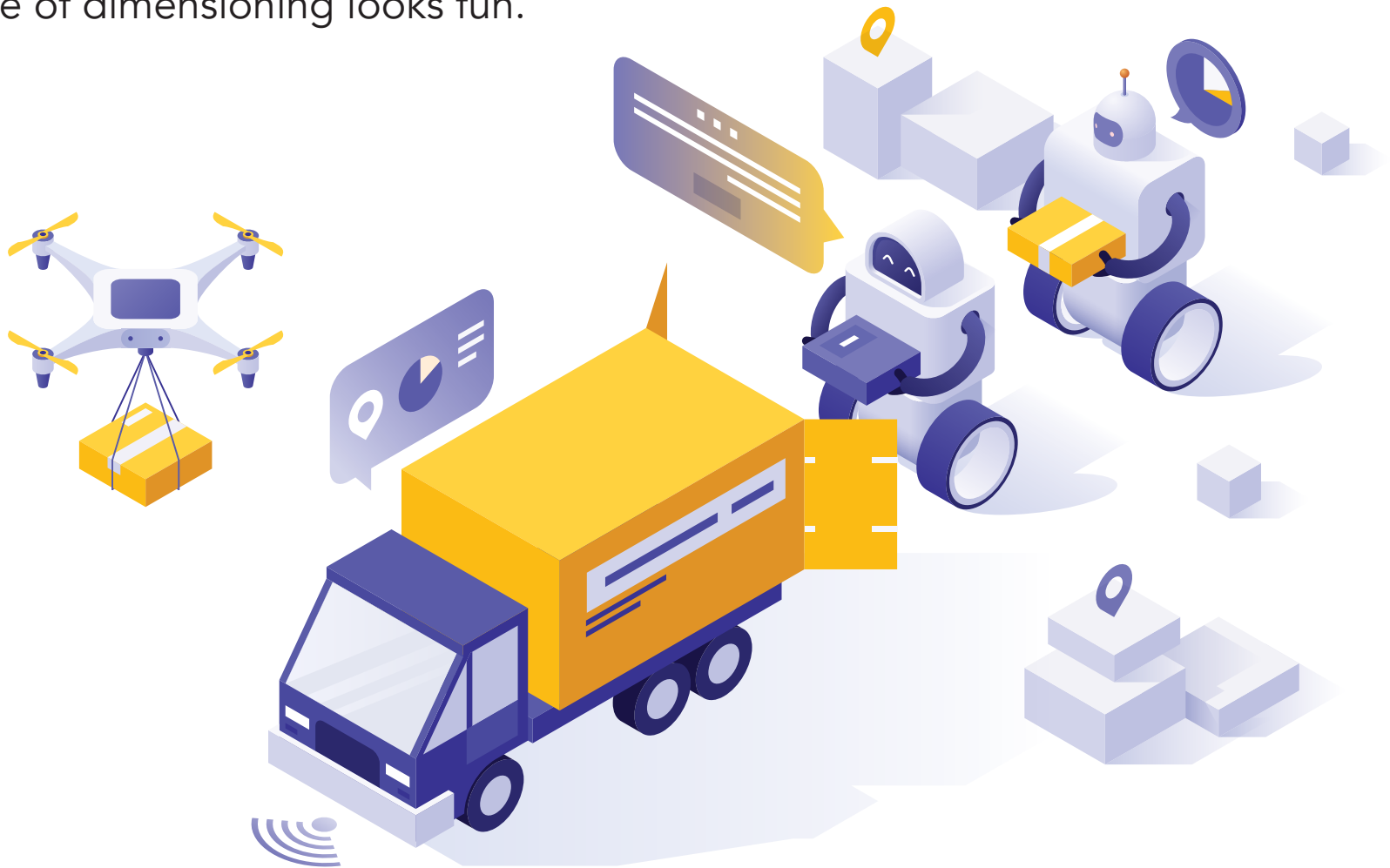


# THE FUTURE OF DIMENSIONING

Robots, drones, and electric cars.  
The future of dimensioning looks fun.



## A GLANCE INTO THE FUTURE OF DIMENSIONING

If indeed as Shakespeare wrote, “What’s past is prologue,” that would indicate one company has been setting the stage for the future of dimensioning for the past thirty years.

“We’ve gone from measuring cubes only to odd shapes, to now identifying the smallest bounding box for items,” Robert Kennington, Director of Engineering at Cubiscan said.

That progress is only the beginning of how the world of dimensioning is impacting the world at large.

*“I see the future trends of dimensioning being very similar to consumer trends.”*

Dean Simmons  
Cubiscan, Director of Sales & Marketing

As speed, value, sustainability, and convenience become more important to consumers, these four components are also driving the future of dimensioning.

## SPEED

Instant gratification is becoming closer to reality in all areas of life. When customers purchase an item, the faster they receive it, the higher their satisfaction. Warehouses are locating in smaller cities, closer to homes, in an effort to reduce shipping times and increase customer satisfaction. These warehouses are dealing with previously unknown space constraints, and it’s critical for their workers to know exactly how many items they can stock in that space.



*“As warehouse space becomes more expensive, the need for dimensioning will become more important. This will be true even for small e-commerce companies that are not currently dimensioning their items.”*

Brandon Taylor  
Chief Hardware Designer

Taylor emphasized that companies that can use their space more efficiently will have greater advantages as time goes on. Dimensioning systems from Cubiscan provide workers with valuable measurement and SKU information, and seamlessly integrate with warehouse management systems.

“In the future, and even currently, there is increasing value to knowing and understanding this type of data for all aspects of logistics,” Kennington said. “The more information available, the more possible it is to optimize processes and help people, and perhaps, even robots, do their jobs.”

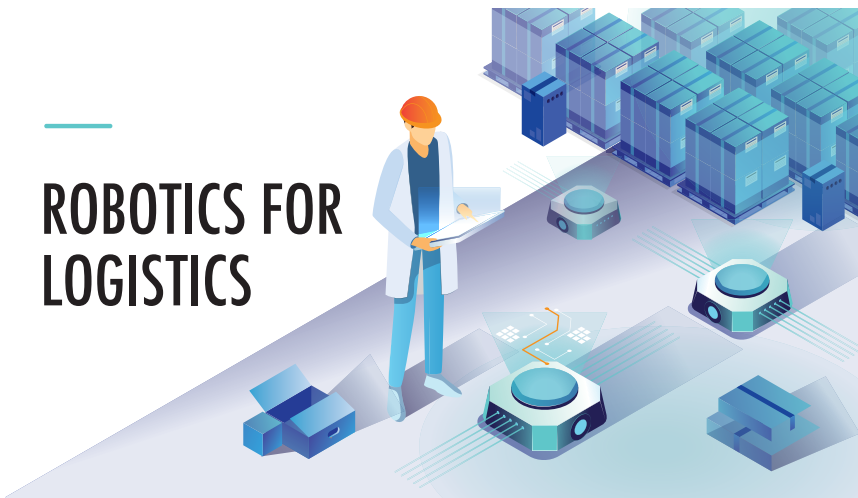
In doing their jobs, every minute counts. There’s no time for manual measuring and figuring.

Dimensioning systems provide nearly instant information such as height, length, width, weight, stacking and packing information.

“One of the main pain points e-commerce companies face is speed, and it’s related to inaccurate data and manual labor. When you automate the dimensioning process, you reduce labor costs. You take the manual aspect out of it, and you increase the accuracy of the data output. That helps increase the speed for e-commerce companies as they’re trying to fulfill these heavy demands from consumers to fulfill orders in one to two days,” Simmons said.

This accurate data output is key to integrating more automation. For example, “Our customers are able to use more automation in other warehouse processes such as vertical storage and pick to light systems and have them run at peak efficiencies,” Shannon Flinders, Cubiscan sales manager said. “Accurate dimensioning allows better use of space and knowledge of warehouses,” she added.

## ROBOTICS FOR LOGISTICS

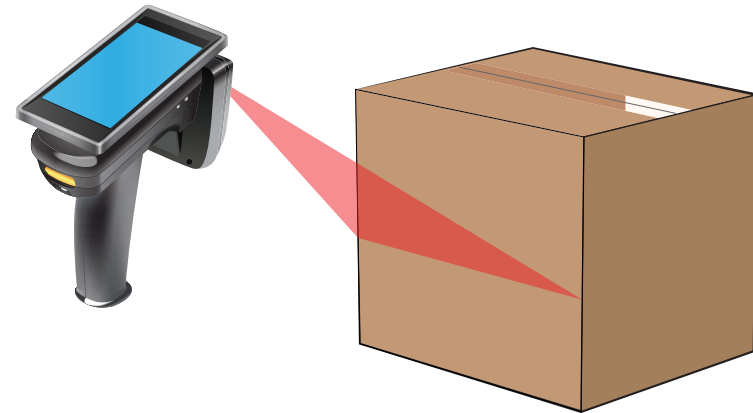


## VALUE

With a single tap or click, customers can compare products to identify which one will produce the best value for the least cost. This is another component, like speed, which is passed throughout the logistics process. When sellers and warehouses can reduce their costs, they can pass those savings down line to the consumer.

“Cubiscan is planning for the future by continuing to invest in our research and development efforts. We continually evaluate new and state-of-the-art sensing technologies on top of available technologies, identifying the best solutions to scan for the dimensions of items.”

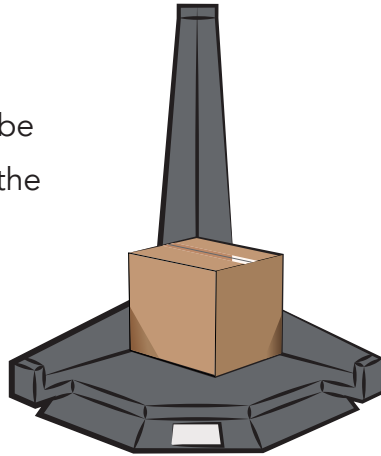
“We also invest in adding more value to our products by integrating those products into more automated solutions. That would include conveyor, controls, and sortation functions, so that we can provide more value to our customers as part of a turn-key shipping solution,” Cubiscan President Randy Neilson said.



“Dimensional devices of the past have been larger and a little bit bulkier,” Simmons said. “People want devices such as phones to be smaller, while still maintaining the capabilities of past models. The same can be said for dimensioning systems. Users want them smaller but also want the data to be just as rich and usable,” he continued.

“One trend we’ve noticed is that some places are looking for handheld dimensioners,” Neilson said. “While those are not quite as accurate, in certain situations and applications they may be good enough, and that’s driving down the cost.”

Taylor agreed that more cost-effective ways of dimensioning items will be needed and pointed to the [Cubiscan 75](#), and [Cubiscan 100](#) as current solutions for smaller companies that need cuboidal information. For companies that need non-cuboidal information, he suggested that the [Cubiscan 325](#) and [Cubiscan 125](#) are the answer.



“While we’re a smaller company, we’re competitive because we have more human resources dedicated to engineering than some larger companies do. Another advantage lies in the fact that we can partner with larger companies such as AKL-Tec,” Nielson said. “Our philosophy is that dimensioning is much more than measuring length, width, and height—it’s about relationships and networking to provide custom-engineered applications for our customers.”

## SUSTAINABILITY

“There’s also a green aspect to everything that comes from knowing precise dimensional data,” Kennington said. For example, the smaller the boxes, the fewer the trucks needed to transport them. Instead of thirty people in my area going out to various places to pick up their items, one truck comes to my neighborhood to deliver the items.” E-commerce appears to provide customers with an environmental alternative to shopping at brick and mortar stores.

Taylor mentioned that with the current pandemic, the future of dimensioning in the United States alone may become more important. “The U.S. has learned a hard lesson with its reliance on other countries for necessary goods needed by our citizens. There’s a possibility that new companies, and even existing ones, will bring back production of goods that are produced overseas.” Dimensioning equipment will be essential in gearing up these new warehouses and manufacturing facilities.

Cubiscan can provide solutions that add to the sustainability of transportation, Taylor said. “As society embraces electric transportation, dimensioning that includes weights will become very important.” Battery technology is still the weak point for electric vehicles, and while it’s evolving, it has limitations on its capacity so the distance a vehicle can travel is limited.



A semi-truck with a full heavy load will drain a battery more rapidly than a semi-truck with a light load, so dimensioners will be critical to calculate whether or not the semi-truck can make it to its destination.

Dimensioners will also be helpful in minimizing vehicle battery charging times. Taylor suggested that the information needed to load plan while balancing weight with the charge of the batteries will be of utmost importance and that some of Cubiscan’s existing machines such as the [Cubiscan 1200-AKL](#), [Cubiscan 150](#), and [Cubiscan 110](#) will be helpful in these scenarios.

## CONVENIENCE

Convenience is another component, like speed and value, which is passed along throughout the logistics process. Cubiscan’s equipment provides greater convenience for warehouses, shippers, and carriers, enabling each to continue to pass along greater convenience to their customer. In a world where so many processes are optimized and automated, people have come to expect things to be easier for them. The demand for convenience will continue to grow.

As the variety of items being shipped is increasing, (think meal kit deliveries) the future includes investigating other ways of delivery, such as drones. “Some companies are already doing this,” Taylor said, referencing an article from Unmanned Air Space<sup>1</sup>. Knowing the dimensions and weights of items will be critical to proper delivery. When a customer places an order online, the system needs to be able to determine if drone delivery is possible. The only way to know this is by having accurate dimensions and weights of the items, which is done when they are received into the warehouse.



This information can also be used to pair the item with an appropriate drone, as both large and small drones can be in the delivery companies' fleets. “Battery limitations are also an issue with drones,” Taylor pointed out, but currently available dimensioners can help precisely calculate information in order to ensure that the drone can make the round-trip delivery from the warehouse to the destination and back.

## CONCLUSION

While speed, value, sustainability, and convenience propel the e-commerce, warehousing, and logistics industries into the future, the world of dimensioning equipment is right beside them, and maybe even a step ahead.

“We’re ready for the future,” Nielson said. “The way we prepare is by having very good communication with our customers so that we can understand the deficiencies they’re seeing and put together resources and modify our offering to be the robust solutions they need.”

<sup>1</sup><https://www.unmannedairspace.info/latest-news-and-information/drone-delivery-operations-underway-in-26-countries/>