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Under pressure because of the COVID-19 situation, major shipping carriers like FedEx, UPS, and USPS into adjusted their policies regarding charging based on parcel dimensions vs. weight,.

Cubing or dimensioning solutions helps capture data and proportions of products tppshipping costs can be predicted with much greater accuracy.

Manufacturers, distributors, and retailers are grappling to meet the exponential online demand fo essential commodities, apparel, protective gear, medication, and electronic appliances, to sustain in the market.

Logistical freedom during the **COVID-19** crisis

Logistics providers have been a boon to consumers and e-commerce businesses during this unexpected pandemic. The warehouses and freight systems operate day and night without quality compromise, to facilitate the continuous supply of quality necessities.

Leveraging advanced automation, computer vision, and dimensioning technology, logistics companies ensure seamless distribution and shipping of products without any damage or delay.

According to the latest Research and Markets report, the global logistics market size is set to grow from \$ 2,734 billion in 2020 to \$3,215 billion by 2021, at 17.6% YoY growth.

Logistics companies are adopting Artificial Intelligence-led processes and advanced technologies to increase operational and service efficiency while optimizing cost and profitability.





Why is warehousing critical to logistics?

Warehousing is a significant part of logistics. It manages the transportation and storage of inventories, balances the demand and supply of goods, and helps increase profitability in multiple ways.

There must be perfect alignment and collaboration between the warehousing and shipping functions for increased efficiency in inbound and outbound logistics.



Challenges faced by warehouses in logistics firms

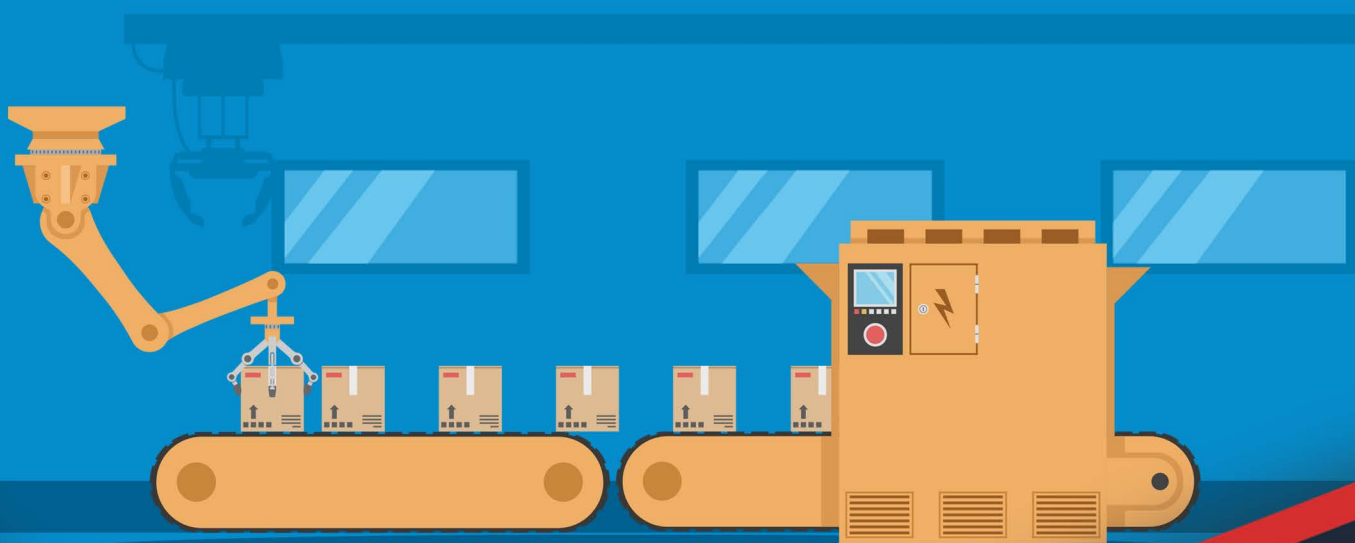
Rising fuel prices and capital expenses, scarcity of warehouse spaces, and workforce constrictions have forced logistics service providers to cut costs. As every inch of warehouse space is money, logistic firms are vying to utilize the space efficiently without compromising time and quality. Companies are struggling with gainfully employing the warehouse staff by focussing on critical supply chain functions that improve productivity and profitability rather than on monotonous, dreary tasks that can be automated.

Reverse logistics is another crucial area that requires attention. If the product return process is not handled well, it will most certainly result in the loss of customers, goodwill, and revenue. Dealing with transporting, repacking, quality checking, and refurbishing products returned by the customer is a significant challenge logistics businesses face. Logistics providers require added visibility in inventory control, efficiency in time management, predictability in inventory movement, and increased security and quality.

Resolving warehouse challenges

Today several logistics companies are reeling towards dimensioning technology to resolve warehouse challenges. Implementing effective dimensioning systems play a crucial role in helping warehouses gain a competitive advantage and become more profitable.

Dimensioning systems automate the measurement of length, breadth, width, and weight of the products and packaging, to optimize cost, effort, and quality. It eliminates unnecessary manual processes and tedious paperwork by streamlining attribute measurement, data management, and data synchronization.



Dimensioning and weighing systems



Dimensioning and weighing systems comprise sensors in the form of ultrasound, lasers, vision or Charge-Coupled Device (CCD) cameras, and infrared light that measures physical attributes.

The dimensioning system uses 2D cameras, barcode scanning systems, label printers, and dynamic/static weighing structures to capture and maintain a comprehensive master record of dimensions and freight properties of products.

The captured dimensional information is digitally synchronized with the Warehouse Management Systems (WMS), from where it delivers value to various supply chain functions.



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of any object and manage all your dimensioning
needs with an AI-driven solution.***

Dimensioning equipment



The instruments used to measure the height, breadth, width, and weight of a product are called dimensioning equipment. Choosing the right dimensioning equipment is critical for warehouses to increase measuring efficiencies, especially in products that are irregularly shaped with protrusions and troughs.

Based on the purpose and budget, warehouses can choose between measuring equipment for small parcels and portable work stations, high speed in-line cubing machines for automated sort facilities, and large static systems for larger palletized loads.



Benefits of dimensioning and weighing

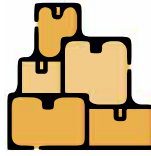
Investing in an excellent dimensioning and weighing system offers the following benefits to warehouses.

Accurate pricing

Exact dimensioning and weighing facilitates the accurate computation of shipping cost.

Precise dimensional data helps logistics firms decrease shipping expenses and avoid product returns and charge backs because of incorrect dimensions and freight charges.





Easy slotting

Organizing products in the most compact, efficient, and optimized manner is essential in a warehouse. By knowing the exact dimensions, weight, and characteristics of the items in the package, warehouses can ergonomically slot the products to avoid handling issues and damages.



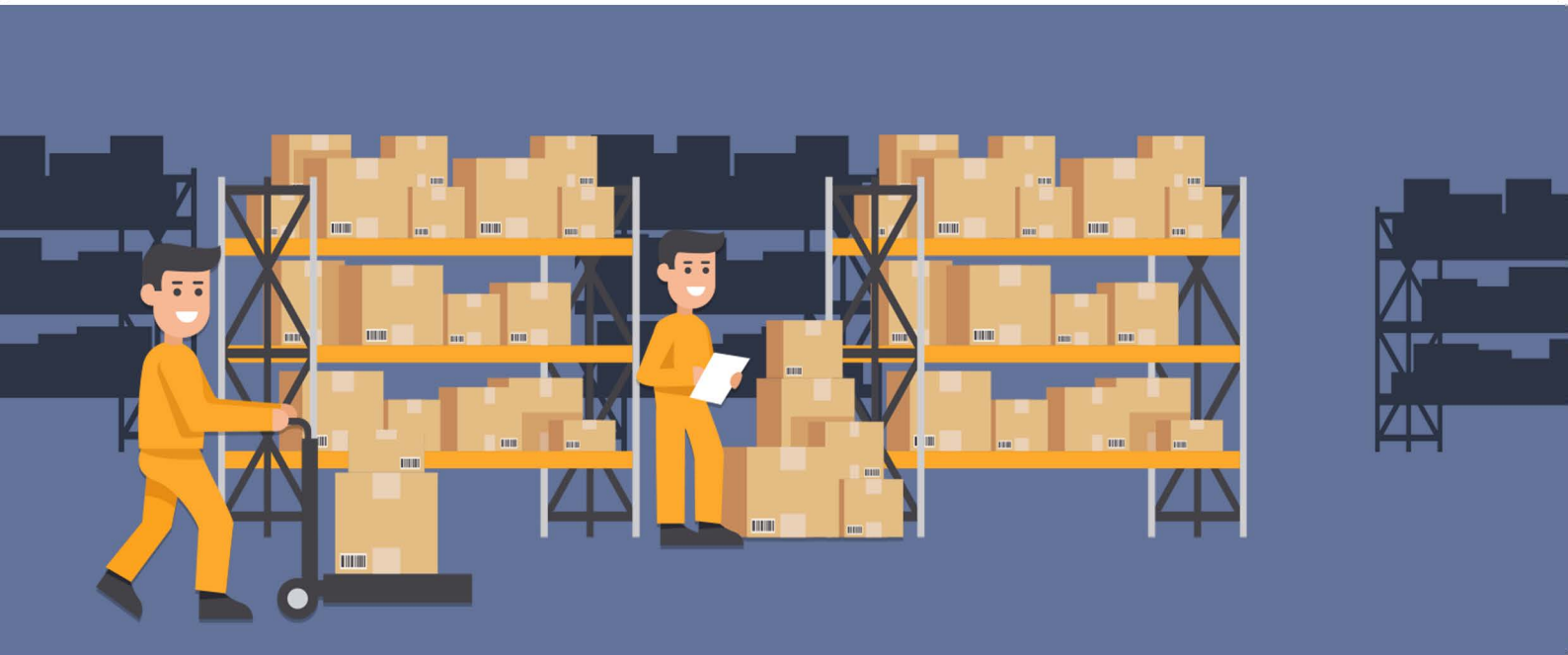
Improved cartonization

Precise dimensioning and weighing helps in defining the best way to pack each carton. The weight and volume of the product determine the type and amount of packaging material needed to ensure safety and lower packing costs. It also prevents wastage of effort and time involved in trying different cartons for the products.



Supports capacity planning

Capacity planning plays a crucial role in warehouses with space constraints. Dimensioning augments capacity plans by reducing fulfillment costs, minimizing picking time, and optimizing available space.



Boosts quality control

Dimensioning identifies initial defects in shipments. It saves time on physical inspection, fastens quality control, and helps avoid product returns and associated costs

Seven ways dimensioning specialists can transform warehouses



Logistic service providers today are increasingly collaborating with dimensioning specialists to transform the efficiencies of their warehouses.

The dimensioning services help warehouses to boost profitability, reduce costs, and optimize productivity.

Read on to know seven ways logistics providers join forces with dimensioning specialists to transform their warehouse capabilities.

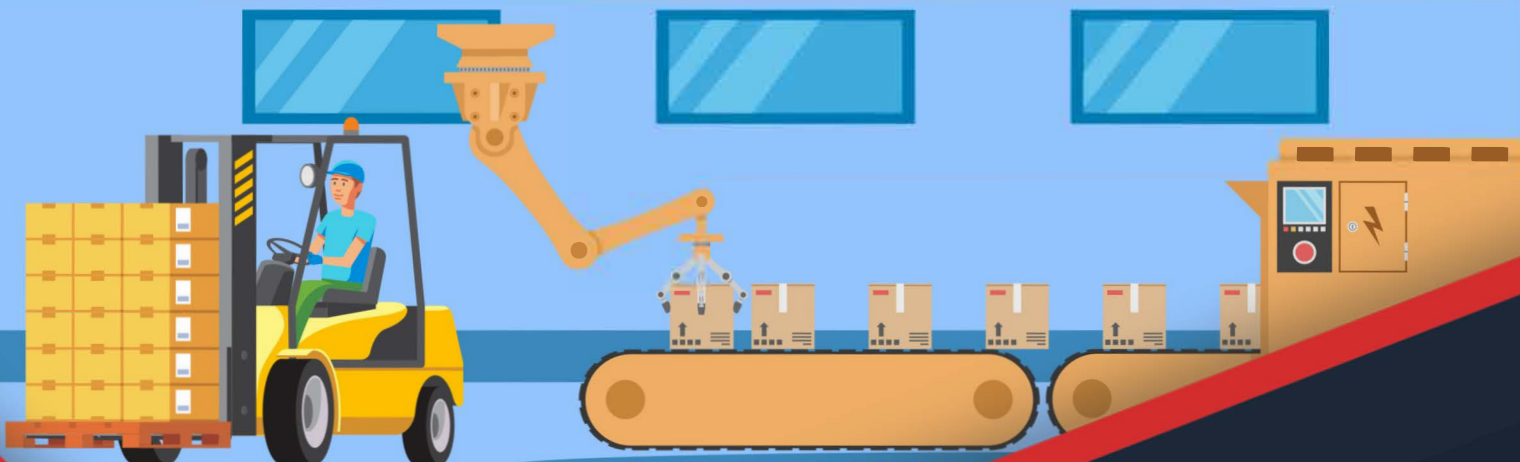


Automate the dimensioning process

The conventional measuring process using tape and ruler is time-consuming, error-prone, and workforce intensive. It results in delays and undetected damages, thus increasing quality costs and affecting productivity.

Automating the dimensioning process measures the Stock Keeping Units (SKUs) efficiently and assists in resourceful slotting, cartonization, and quality checks. It simplifies warehouse functionalities, reduces carbon footprint and wastage, thereby reducing operational costs and overheads.

Easily integrable with technology innovations such as warehouse robots, vertical lift systems, pick-to-light systems, and self-driving vehicles, automated dimensioning enhances supply chain functionalities and contributes to higher profits.





Enable better decision making

Dimensioning specialists help logistics providers make better data-driven decisions in the warehouse. The information captured by devices such as image sensors, bar code scanners, 2D cameras, and label printers provides accurate dimensions of irregular shaped products that are challenging to measure.

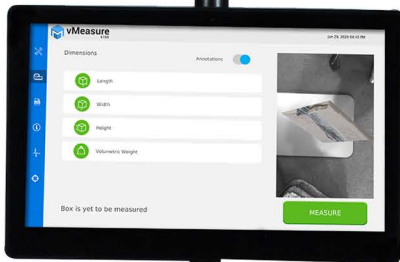
Using the inputs' insights, logistics firms can make optimal decisions in space allocations and quality corrections. Dimensioning specialists also help warehouses decide the right packaging, storage space, handling equipment, shipping mode, and freight charges. Dimensioning companies also provide additional services using which logistic firms can make detailed sales projections.



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Determine warehouse rents

With warehouses grappling with space crunch and sky rocketing rents, logistics companies need an effective mechanism to calculate the equitable rental cost. Dimensioning service providers help warehouses to leverage the value and volume of items to determine reasonable rents.

Manual measurement of the physical attributes that determine the value and volume of the SKUs is prone to errors and can be subjective. Dimensioning experts used automated systems to determine the exact value and volume of an item to arrive at a fair rent or leasing arrangement.





Increase throughput

Upgrading material handling systems such as conveyor belts, pallet flow racks, and mezzanines are critical to boosting throughput in warehouses. Increasing the number of units that are processed or moved, and decreasing handling time while fulfilling orders is one of the vital functions of warehouses.

Dimensioning experts help logistics firms optimize warehouse workflows by designing automation systems and machinery upgrades based on the size and weight of the SKUs. Precise measurements of product attributes are imperative to implement the design goals of warehouse machinery that increases throughput.



Enhance revenue recovery



Logistics firms struggle with financial losses due to faulty freight charges, incorrect packing damages, product returns, refunds, and replacements. As most of these losses are attributed to incorrect product measurements, warehouses are forced to optimize dimensioning.

As conventional manual dimensioning is susceptible to errors due to tedious processes and human fatigue, warehouses grapple with the loss of revenue, goodwill, and reputation.

Dimensioning specialists use automated dimensioning systems and equipment to gauge the physical attributes of products accurately. The precision of the measurements drastically improves the productivity, operational efficiency, and throughput of warehouses. Dimensioning experts help logistic companies to identify and rectify discrepancies, arrive at accurate costs, plan effective resource utilization, and recover the revenue lost during the manual measurement days.

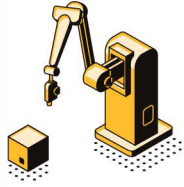


Ease inbound shipping



Legacy receiving systems are a significant bottleneck in inbound logistics. Warehouse staff had to manually measure and weigh each incoming package, enter the data one by one into the Warehouse Management System (WMS), and look out for the best location to store the product. This conventional method proved to be vulnerable and unreliable, as there were several gauging errors, data-entry discrepancies and handling damages.

Dimensioning specialists ended all these snags by deploying automated parcel and pallet dimensioners in the receiving area. Within a few seconds, the incoming freight can be measured, captured, sorted, packaged, and sent to its recommended location via AI-led material handling devices.



Implement dimensioning systems

Efficient deployment and maintenance of automated dimensioning systems are essential for warehouses to create value and improve the profitability of logistics and transportation service providers.

The first step in the implementation of an automated dimensioning system is choosing the right dimensioning specialist. If this step is done well, then the rest will fall in place. Warehouses need not worry about increasing operational and cost-efficiency.

The next step is selecting the right dimensioning equipment and infrastructure. Then the warehouses must execute a robust strategy to measure and weigh all SKUs effectively. The measured details must be captured and maintained in a master file for creating value in supply chain functions and applications.



Conclusion

Today, there's an inherent urgency in the warehouse to innovate and harness emerging technologies. The race is on to win customer share through competitive differentiation in terms of accuracy and speed while meeting omnichannel demands. But your first step should be to ask questions like:



What are the types of goods that are stored in the warehouse?



What are the dimensioning goals of the warehouse?



What is the perceived lifetime of the warehouse?

At the end of the day, automating the dimensioning system may be a simple yet powerful process, but requires the sort of experience and expertise that can only come by collaborating with a trusted dimensioning specialist.

That is vital to winning the logistics game and unlocking the gateway to optimizing cost, effort, and quality while enhancing operational efficiency and profitability.

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India:

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