



Mobile Dimensioning

Streamline your picking, packing and shipping operations

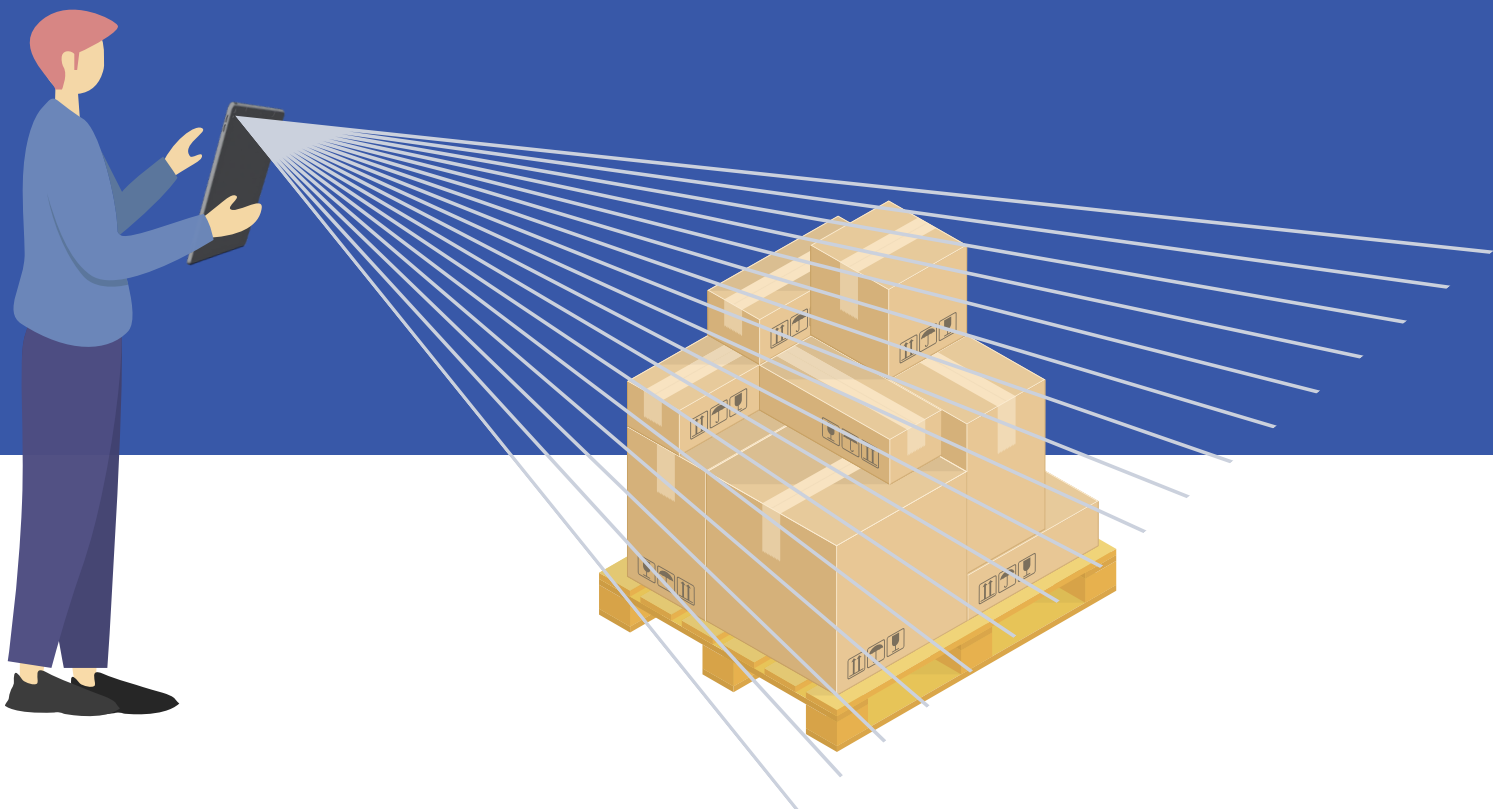


Table of Contents

1. Need for Accurate Master Data	3
2. Use Cases of Dimensioning	4
3. Manual Dimensioning	6
4. Mobile vs Static	7
5. Optioryx Mobile Dimensioner	9
6. Closing Remarks	12



1. Need for Accurate Master Data

With the ever-evolving trends in the logistics & supply chain industry, companies are facing new challenges to maintain accuracy and efficiency to keep up with the growing demand.

Trends

The surge in **order volumes** and **SKU diversity** is one of the trends that makes it challenging for companies to manage inventory and maintain order fulfillment accuracy.

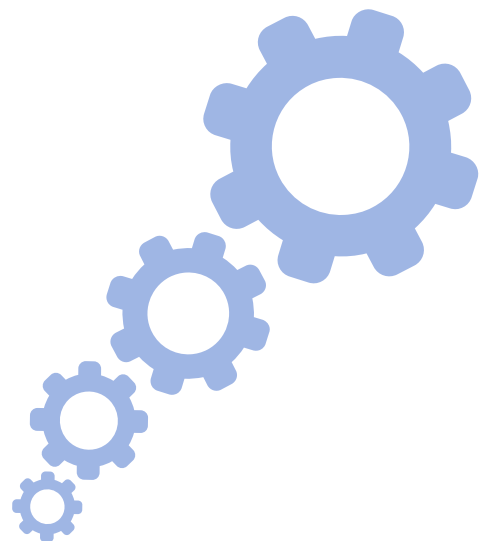
The **rise in transportation costs** puts pressure on companies to reduce shipping costs.

The **complexity of rate structures** poses a challenge in accurately providing the dimensions of shipped items to avoid false **volumetric surcharges** or incorrect invoices.

Consequently, these trends lead to **margins under pressure**, forcing companies to look for initiatives to **increase logistic efficiency levels**.

In this dynamic logistics landscape, **precise dimensional data** is the **source for optimization and efficiency gains** in the pick, pack, and transport flow.

Therefore, the need for **automated dimensioning solutions** is growing.



2. Use Cases of Dimensioning

Accurate master data enables making informed and data-driven decisions, leading to increased operational efficiency in various workflows.

Invoicing - proof of dimensions

- Ensure that you are **charged only for the space you use**, without incurring additional costs due to incorrect weight or dimensional data.
- Provide **objective proof** of the measured items, to **avoid discussions** between the carrier and customer regarding the dimensions of the shipment.



Retrieved dimensions of a pallet

Inbound slotting

- Receive **detailed information** on the size, weight, and other characteristics of inbound items.
- Determine the **best location** for each pallet or parcel in the warehouse, reducing the time and effort required for slotting.

For more information on these topics check out our blogs on [warehouse slotting](#), [reasons for pallet dimensioning](#) & [benefits of dimensioning](#).

Optimize the process of **cartonization**, **pallet load building**, and **truck load building** by having the advantage of **accurate SKU dimensional data**.

For **cartonization**, accurate master data translates to:

- Increased fill-rate
- Reduction in handling time by knowing the right box size
- Accurate recommendations of the optimal configuration of items

For **pallet building**, accurate master data translates to:

- Calculation of the number of pallets required for an order
- Selection of the right pallet types and sizes
- Managing complexities such as stackability, pallet overhang, and load stability.

For **truck load building**, accurate master data translates to:

- Increased fill rate within a truck
- Reduction in the number of trips required
- Forecasting the availability of trucks and types of trucks required for an order.

Forecast shipping and transportation costs: Determine how many containers or boxes are needed to fulfil an order

Provide fill-rate percentage: Provide customers with a fill-rate percentage, indicating the remaining available space. Give them the incentive to order more by maximizing the use of the container(s), and ensure that they receive the maximum value for their shipping cost.

Improve warehouse space utilization: Determine the most efficient way to store items in a warehouse. Increase the amount of inventory that can be stored in a given space, and reduce the need for additional warehouse space.

3. Manual Dimensioning

Measuring freight manually leads to **imprecise measurements**, which results in **inaccurate masterdata** in your WMS, TMS, or ERP system.

Given the errors associated with manual measurement tools, **manual means** of measurement have become **outdated** in the face of new demands in the industry.

Time-consuming

- More time and effort - especially when dealing with large or irregular items
- Prone to bottlenecks and delays in order processing time

Prone to errors

- Human errors when using tape measure
- Errors when writing down on paper or inputting data into systems
- No barcode scanning
- Inconsistent results

Limited Scalability

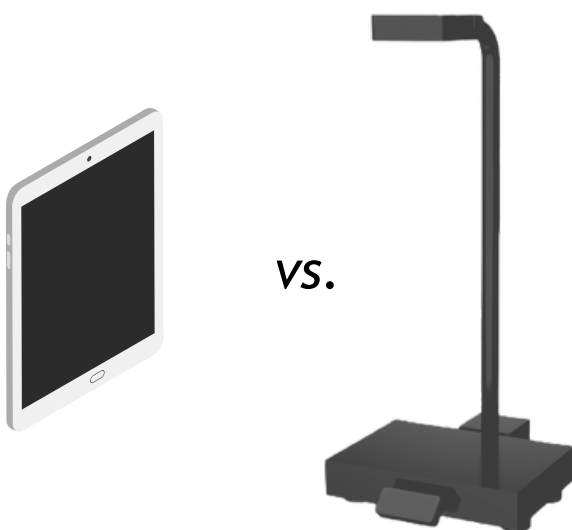
- Increased labor-dependence
- Time loss
- Higher cost
- Difficult dimensional data maintenance
- Lack of integration

4. Mobile vs Static

Static dimensioning is a suitable solution for **small boxes or pallets**, but it is not without limitations.

Warehouse workers experience **slower throughput** and **increased strain**, because of the lack of mobility.

Mobile dimensioners provide a solution that allows users to **capture dimensional data on the go**, without the need for bulky equipment or specialized training (e.g., forklift licenses).



Companies that offer static dimensioning systems have **multiple products for different purposes**, such as a dimensioner for pallets, a dimensioner for large boxes, or a dimensioner for small boxes.

These dimensioners can cost several thousand euros, and if you require a dimensioner for all sizes of pallets and boxes, the cost of acquiring these solutions can be prohibitively expensive.

Mobile dimensioning systems enable dimensioning of boxes and pallets of all sizes, making it possible to use a single solution for all purposes.

Static dimensioning systems have a single purpose of measuring the dimensions of boxes or pallets. However, accessing additional features beyond dimensioning often demands **more than just dimensional data**, which static systems typically do not provide.

This lack of information can restrict their utility in supporting other operations.

	Static Dimensioner	Mobile dimensioner
Hardware cost	15k € +	<1k €
Object types	Small items or big items	All size items and pallets
Mobility	Fixed location	Everywhere
Barcode scanning	✗	✓
Software	Lack of integration	Fully integrated: Webapp + API
Pictures before transport	✗	✓
Stackability, 'this side up' and custom info fields	✗	✓
Transport cost calculation	✗	✓
Accuracy	99%	97%
Architecture	Monolithic	Modular

Comparison table between a static and a mobile dimensioning system

5. Optioryx Mobile Dimensioner

Optioryx's mobile dimensioning app allows you to **quickly retrieve dimensional data and access it in real-time**, while simultaneously enriching your master data.

By seamlessly **integrating with your existing workflows and systems**, Optioryx makes the transition from manual to automated solutions effortless and efficient.

The Optioryx mobile dimensioning app consists of **two modules**:

1. the iPad app
2. the web application with an API.

The application communicates with a web-based app that allows you to view and manage the data collected from all the iPads in a field.

In the app, you can choose your own **customizable workflow** which fits your operations with features such as:

-  Barcode scanning
-  Weight scale integration
-  Constraint information
-  Transport cost calculation
-  Invoice auditing
-  Quality control



Customize Your Workflow

Barcode scanning

Read the barcode and link it with the EAN code and pallet or box ID, allowing you to access the data within your WMS, TMS, or ERP. the data within your WMS, TMS, or ERP.

Weight scale integration

Scan and register the weight of the item on a scale and match it to a barcode.

Custom information

Add necessary custom info fields such as stacking information, 'this side up' information, rotational information, and fragility of a box or a pallet.

Manage inventory according to specific warehouse requirements and ensure that items are stored and transported in the most efficient and safe manner possible.

Transport cost calculation

Receive transport cost calculations based on your carrier contract rates right after receiving dimensional data.

Ensure that your shipping costs are always reflected accurately in your invoice auditing.

Invoice auditing

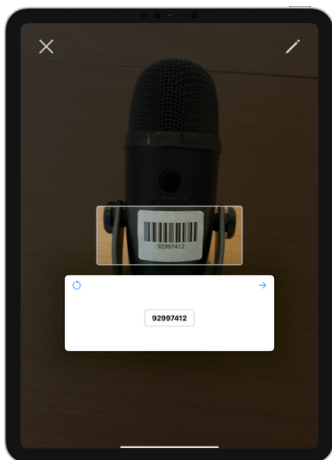
Provide proof of the retrieved dimensions of the box or a pallet, thus eliminating any debates regarding the size and weight of the shipment.

Quality control

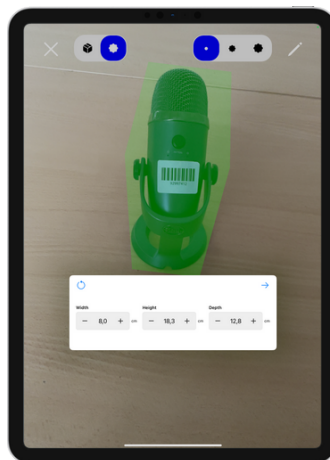
Provide evidence of the boxes or pallets' condition upon arrival or before transport by taking a picture of the order with a timestamp, establishing a clear timeline of events.

App Integrations

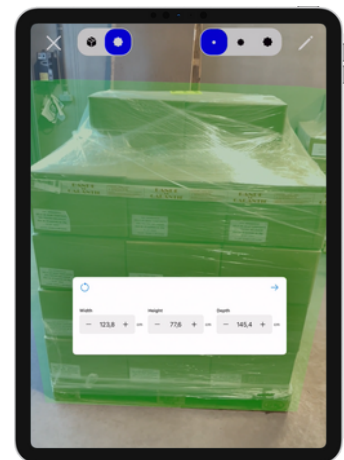
The **second module** of the **Optioryx mobile dimensioning app** is the **web application and API**.



1. Scan the barcode



2. Scan items or pallets

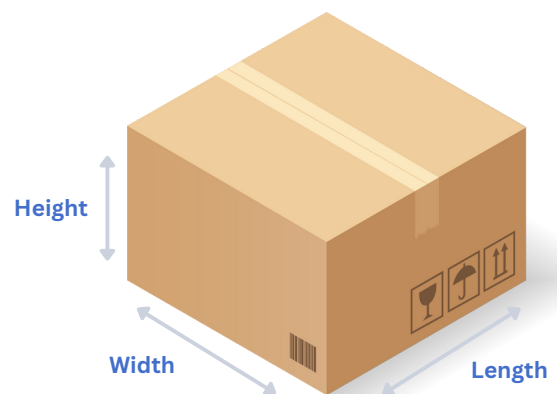


Optioryx API is **integrated within your WMS, TMS, or ERP system**, allowing you to **transfer data collected by the mobile app** to your existing systems.

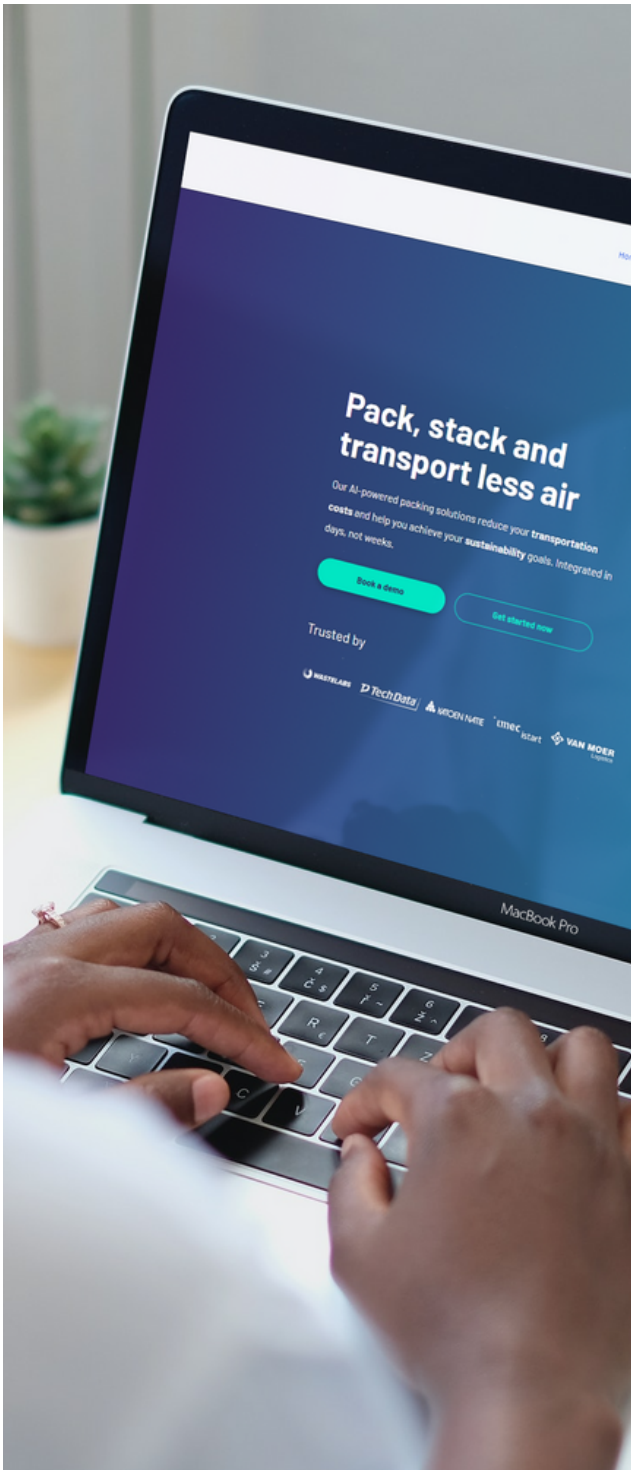
The integration ensures that the data collected is always **up-to-date, accurate, and accessible across all your systems**.

The solution is adaptable and easily upgradable, enabling companies to stay current with the latest updates and features.

Optioryx mobile dimensioning app is designed to work specifically with **2020 or newer iPad Pro models**.



6. Closing Remarks



As e-commerce continues to grow and results in higher order volumes and a wider range of SKUs being shipped across the world, the need for more sophisticated dimensioning solutions is on the rise.

Mobile dimensioning solutions are the answer to these demands, offering a more agile, adaptable, and scalable approach to logistics operations.

Streamline your operations and stay ahead of the competition with the right dimensioning solution - the Optioryx solution.

[Try it for free!](#)

Contact info

 Lammerstraat 35, 9000 Gent

 www.optioryx.com

 info@optioryx.com