Learn How the Right Load Planning Software Can Help Your Company Thrive

Everyone is aware that supply chains are under increasing pressure, with little sign of relief any time soon. The situation is leaving companies scrambling to not only find enough containers but ensure they are filled to maximum capacity, and at the same time, they need to be filled safely. Nobody wants to deal with reverse logistics any more than necessary, so it is essential to make sure products arrive in perfect condition.

In addition to shipping containers, Load Planning software can help all organizations where day-to-day work involves:

- Loading ULDs, pallets, railcars, and trucks.
- Transporting hard to load items such as irregular shapes.
- Transporting items that are subject to strict loading rules, meeting all weight restrictions.
- Many companies need to ship hazardous materials, so loading rules must be Hazmat and Li- ion compliant.
- Cartonization, ensuring the optimal size carton is always selected.

What Are the Potential Benefits of Using Load Planning Software?

Any company that regularly ships materials, parts or finished goods will benefit from good Load Planning software. Well-designed Load Planning software will grow with a company and is easy to integrate with any new or existing WMS. Businesses can achieve benefits that include:

- Reduced labor costs
- Reduced shipping costs
- Reduced packaging costs
- Reduced carbon footprint – a concern for many companies as they look to increase their green credentials
- Excess packing materials are eliminated
- Reverse logistics due to damaged items are reduced
- Customer satisfaction improves
- Operations are streamlined

Often, companies will have one or two people who are highly experienced with packing and loading and who can achieve excellent results. But if they leave, retire or fall ill, this knowledge disappears with them. However, even the most inexperienced personnel can use good Load Planning software.
It should only take an hour or two to get them up to speed, eliminating that concern of losing tribal knowledge.

Most companies want to improve their bottom line, and the savings can be considerable. When analyzing the data produced by our customers, we have seen cases where companies save six-figure sums within the first year when choosing our solutions.

**About MagicLogic’s Load Planning Software**

MagicLogic’s Load Planning software results from more than twenty-five years of R&D, providing users with powerful and reliable Load Planning solutions using sophisticated algorithms to gain optimal results. Our solutions include Cube-IQ® and BlackBox®. We also provide custom solutions as many of our customers have complex requirements which off-the-shelf solutions cannot meet.

**Cube-IQ®**

Cube-IQ’s interface can be used on a desktop workstation or laptop. It has an intuitive interface with drag-and-drop functionality. Personnel responsible for packing and loading containers can generate fully optimized load plans, providing a step-by-step guide to cubing out a load efficiently. The software allows users to optimize a load in as little as three clicks simply by selecting the right container, choosing the products and the number to be loaded and clicking the Optimize button.

![Cube-IQ Interface](image)

Loading and stacking rules are fully flexible, allowing users to define the orientation of a box. It works in multiple units and languages, selecting the right container for your load and providing optimal volume/weight utilization. In addition, the built-in database engine has full import-export capabilities.

Our web version ensures users can access our Load Planning software at home, on the road or in the warehouse.

**BlackBox®**

Black Box is a Windows-based, scalable plug-in service providing high-speed cartonization for efulfillment orders. It optimizes a selection of cartons or boxes in near real-time, order after order. Black Box works with any WMS/ERP system and with legacy systems. It includes industry-standard interfaces, so minimal work is needed to integrate it with existing systems. BlackBox loads
difficult products with maximum efficiency, including rolls, L-shapes, cylinders and tubes, and ULDs.

It can split containers into multiple loading zones, protecting products, ensuring stability and safety. Priority items can be loaded first, and loads can be cubed out using option items. Our proprietary loading algorithm is central to BlackBox, resulting from decades of intensive research and industry experience.

**What to Look for When Choosing Load Planning Software**

There is a plethora of Load Planning software on the market, offering an array of different functions and price points. Choosing the right software takes time, a problem when so many logistics managers and load planners are time-poor, so it is worth spending a few minutes identifying the functions your company needs.

1. **Is the Software for Installation on a Single Computer or Multiple Devices?**

Smaller companies may only need a single license installed on one computer, where it is used by the same load planner every day. They can plan and edit the loads if needed before sending them to the packers.

Larger companies will need more flexible options, such as a license that is installable across multiple devices, especially with more people working from home. For example, our Concurrent or Floating Cube-IQ license is installable on multiple devices for use by any one person at a time. On the other hand, large businesses routinely planning thousands of loads daily need multiple single or concurrent licenses or a more advanced system such as BlackBox that integrates with their WMS.

2. **Can the Logistics Software Load All Types of Containers?**

Some Load Planning software offers only basic functionality and cannot load all the differently shaped and sized containers. However, even if you don’t need to load any size of container, ULD or rail car right now, you may need these functions if or when your operations expand.

3. **Is the Load Planning Software Optimizing Responsively?**

The response time between choosing your container and products and optimizing the load should be nearly immediate. The software might not use powerful enough algorithms if loads take longer or fail to achieve a good fill percentage. In addition, it may not be reliable for continually picking and packing loads optimally. MagicLogic optimizes loads in near real-time, order after order which is important for all businesses but especially essential in eCommerce.
4. Can the Load Planning Software Print Load Plans and Export Optimized Loads to Mobile Devices?

Some companies like to print out load plans for packers, while others need to export them to mobile devices or use a mix of both. Many of our customers find sending a load to a mobile device is an especially useful feature of our software, as it allows packers to view step-by-step, color-coded loading plans from all angles.

5. Can the Load Planning Software Import and Export Data Easily?

Load Planning software should easily import and export data using standard formats, including Excel or CSV files, and MagicLogic Load Planning software provides these functionalities. Additionally, it should have excellent plug-in API integration with well-known warehouse management systems.

Good Load Planning software can improve overall operations and profitability, often with only a low investment. To discover how MagicLogic software solutions can assist your company, contact us to ask for your free demonstration and trial.

Executive Summary

Supply chains are under increasing pressure and the need for good Load Planning software is increasingly important. Choosing the right software can help a company to continue to grow and thrive. Learn how MagicLogic software solutions load cartons, pallets, shipping containers, ULDs, and railcars optimally and safely. Reduce your company’s labor and shipping costs, and carbon footprint with Cube-IQ® and BlackBox® Cartonization and Palletization software.