

# THE CASE FOR AUTOMATION

ADVANCED INTRALOGISTICS WHITEPAPER

Prior to the COVID pandemic, the shift to an automated supply chain already had been trending upward. However, when the pandemic hit – and created both a labor shortage and an e-commerce boom – the trend accelerated exponentially.

Along with other supply chain disruptions, these new market realities drove warehouses to look to automation to bridge the gaps in operations and improve productivity. Automation has fast become an invaluable option for warehousing, distribution, and fulfillment operations.

Industry experts expect this shift toward warehouse automation to continue unabated. According to estimates, the market is expected to grow by 1.5x by 2025 and to cross \$37 billion by 2030.

For many businesses, the cost of investing in warehouse automation is offset by the enormous benefits that can be realized. Automation can provide **solutions for labor shortages and safety, support lean management in eliminating waste, and optimize operating space and productivity.**

## Solving For Today's Labor Challenges



Linde L-Matic Automated Guided Forklift

Today, machine power is augmenting manpower to keep goods moving, workers happy, and costs down. One approach to automation is leveraging automated guided vehicles (AGVs) to reliably perform a variety of repetitive transportation and pallet handling tasks.

An AGV is a driverless transportation vehicle used in manufacturing facilities and distribution centers where tasks are repetitive and can be completed without human management. AGVs can decrease costs by greatly reducing operator expenses.



**MYTH: There is a misconception that automation is going to replace employees. That is simply not the case.**

According to Jason Huedepohl, Director of Advanced Intralogistics, “Warehouse automation isn’t there to replace the need for people. It is there to replace the non-value added tasks that are repetitive and non-stimulating, this allows an organization to fill their labor shortage and reposition people to maximize the efficiency of the operation by taking over the more complex processes that require more complex decisions.”

In fact, Huedepohl notes that automation can lead to more engaged and productive employees. By freeing operators from repetitive, low-value tasks, AGVs (such as the Linde L-Matic) can create a more rewarding work environment, raising engagement and lowering turnover.

**46%**  
INCREASE

**FACT: Automation can help increase the productivity of an existing workforce by as much as 46%.<sup>1</sup>**

[1] Material Handling & Logistics, “Labor Shortage Hurts Logistics Industry,” September 2018.

**AGVs also improve safety.** In 2020, there were approximately five workplace injuries for every 100 full-time workers in the warehouse/storage industry.<sup>2</sup> “Warehousing and fulfillment involve a lot of moving pieces, often with the use of heavy machinery,” says Clo Dorneau, National Accounts Manager for Advanced Intralogistics. “Humans sometimes make mistakes due to distraction, exhaustion, negligence, etc. Automation is an effective means of reducing this rate of injury by removing the human element from the most dangerous of processes and allowing labor to be redirected to more productive activities.”

[2] U.S. Bureau of Labor Statistics, 2021.

# Supporting Lean Management

Automation is an important effective multiplier to the lean journey – one of the key tenants of any lean journey is eliminating Muda (uselessness; wastefulness). Automation is a good way to allow a machine to perform a non-value task in repetition with little to no engagement by humans, again allowing them to focus on the more complex tasks that require real-time decision making.

In fact, properly programmed equipment can produce parts within tight tolerances and can provide automatic alerts if the process veers toward upper or lower-tolerance limits. This eliminates Muda like scrap, rework and overproduction – three of the gravest sins of lean manufacturing.

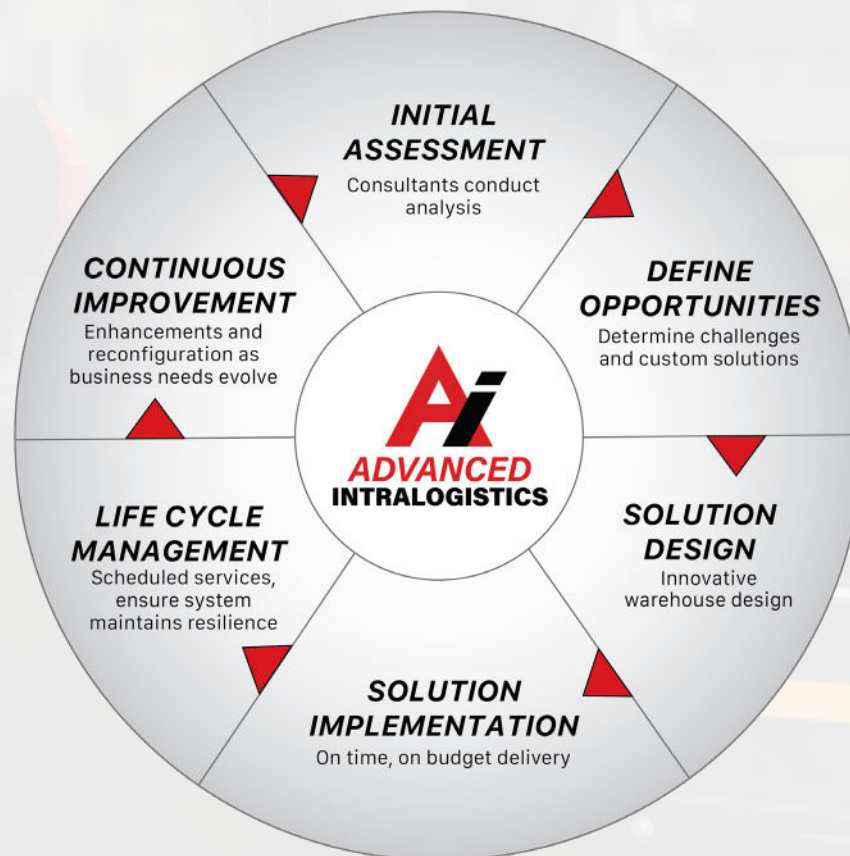
# Optimizing Operating Space and Productivity

The pandemic has accelerated structural trends already at work and reduced new supply, increasing the likelihood of a critical shortage of space. Automation can bridge this gap by improving productivity, enhancing capabilities, and opening up new locations for logistics users.

Last but not least, Huedepohl explains how automation can optimize and maximize operating space and productivity. “This is a benefit that people don’t always equate with warehouse automation. In reality, however, it’s one of the most significant advantages automation provides. Space is becoming a more constrained resource, especially in warehousing and distribution facilities packed with all kinds of goods. An ever-growing product mix can create an ongoing puzzle that becomes increasingly more difficult as you grow.” Implementing automation frees up valuable floor space, which makes room for even more product storage.

## AI360 PROCESS

Advanced Intralogistics takes a brand agnostic approach to your specific supply chain challenges and addresses them with a methodical approach, ensuring to maximize your investment and operational results. Understanding your current business, industry trends, market trends, and the challenges of your current operation will allow our team of specialists to recommend our Advanced Intralogistics AI360 process for your business. The AI360 process starts with an initial assessment of your current operations or strategic initiatives, evaluates the data or assumptions, benchmarks it against industry best practices and current technological advantages, and provides solutions to optimize your specific operational potential.





# YOUR INTRALOGISTICS PARTNER

INTEGRATED SYSTEMS AND WAREHOUSE  
SOLUTIONS YOU CAN DEPEND ON

**Advanced Intralogistics** is an industry-leading full systems integrator for all warehouse solution needs. Offering innovative solutions like conveyor systems, AS/RS, AGVs, Sortation Systems and Robotics, as well as expert services like Warehouse Consulting, Warehouse Design, Expert Engineering, and System Reconfiguration. Advanced Intralogistics is your solutions partner, every step of the way.

Advanced Intralogistics is a Shoppa's company. Our portfolio of brands has maintained its status as a market leader in the material handling industry for over 40 years. The companies within the Shoppa's Group serves our clients across North America with each business having a unique focus and reach. We represent the finest brands globally to offer our customers the largest selection of brands, equipment, and software to provide the best solution according to each customer's unique business challenge.

## GET MORE OUT OF YOUR WAREHOUSE



[advancedintralogistics.com](https://www.advancedintralogistics.com)



[info@advancedintra.com](mailto:info@advancedintra.com)



800.992.1341