



# WHY INTRALOGISTICS DESERVES A SEAT AT THE STRATEGY TABLE

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## Executive Summary

Many people think logistics is all about trucks, ships and planes. But the initial engine of your supply chain isn't traveling down the highway or sitting at the port – it's moving inside your four walls. That's intralogistics: the flow and orchestration of people, inventory and material handling equipment through your distribution or fulfillment center.

When intralogistics works, your operation hums with speed, accuracy and efficiency. When it doesn't, you bleed time, money and customer trust.

Think of intralogistics as the hidden system that either keeps your supply chain delivering or trips it up. It's everything from conveyors and robots to software dashboards and slotting strategies. At Tompkins Solutions, we design distribution and fulfillment centers around intralogistics.

Intralogistics is often misunderstood, despite its criticality to success. Leaders often can overlook intralogistics until they start seeing lagging indicators (missing SLAs, customer complaints, etc.). By this time, it's too little, too late, and the damage is done to customer confidence, business profitability and even employee morale.

In this paper, we'll explain what intralogistics really means, how it shapes facility design and why it's a competitive weapon for today's supply chains. And along the way, we will bust a few myths that hold companies back.

## What is Intralogistics?

Intralogistics is the branch of logistics that concentrates on organizing and optimizing internal processes and flows within a company's facilities. In contrast to external logistics (which deals with transporting goods to customers or between distant sites), intralogistics covers everything that happens inside the distribution or fulfillment center. Intralogistics can be defined as organizing, controlling, implementing and optimizing internal material and information flows, as well as handling goods within an enterprise. In real life, intralogistics touches everything – from forklifts to robots, from shelving layouts to software dashboards:

- **Internal material transport:** Moving goods within a distribution/fulfillment center (e.g., from receiving docks to storage, from storage to packing stations or

between different production and storage areas). This can involve forklifts, conveyor belts, automated guided vehicles, goods-to-person picking solutions (donor totes delivered to a workstation), pocket sortation or even manual cart moves, depending on the operation.

- **Inventory and information management:** Tracking stock levels, item locations and inventory movements in real time. This relies on IT systems (such as Warehouse Management Systems) that record every internal movement, update stock counts and manage replenishment and order fulfillment activities. It can also include weighing, cubing and dimensioning equipment. Effective intralogistics integrates these data flows so that digital information accurately mirrors the physical movements of goods.
- **Distribution/fulfillment center operations:** All the processes that take place inside the facility, from goods receipt and quality inspection, to putaway into storage, order picking and packing, and finally staging and dispatching outbound orders. The whole point of intralogistics is simple: faster, fewer mistakes, and a flow of goods or material that actually makes sense. It can also extend to related tasks like reverse logistics (handling returns internally) and value-added services (e.g., kitting or assembly done inside the distribution/fulfillment center).

In essence, intralogistics is the backbone of a company's internal supply chain, managing how materials and products flow within facilities (especially distribution and fulfillment centers). By optimizing intralogistics, companies ensure that their distribution/fulfillment center operations run smoothly – which in turn enables faster and more reliable deliveries to end customers via the external logistics network.

## Intralogistics – Where Internal Efficiency Defines External Success

21<sup>st</sup> century trends like eCommerce and same-day delivery didn't just raise the stakes – they put intralogistics at center stage. Today's distribution and fulfillment centers face high order volumes, an overload of SKUs and tight shipping deadlines – challenges that can only be met with well-optimized internal processes. As a result, companies are investing in intralogistics improvements (such as automation, better software and refined processes) to increase throughput and accuracy. Increasingly, digitalization, smart machines and data analytics are transforming internal logistics.

Systems integration is key for intralogistics. If your intralogistics doesn't talk to the rest of your supply chain, you're flying blind – and you can't steer what you can't see. For example, Warehouse Management Systems (WMS) and Enterprise Resource Planning

(ERP) software work together to link what's happening inside the distribution/ fulfillment center with external supply and distribution activities. This integration ensures end-to-end visibility: management can see inventory status in real time, coordinate inbound and outbound schedules and make informed decisions quickly.

It also means that intralogistics is not an isolated silo; rather, it is a core component of supply chain strategy. Get intralogistics right, and you get faster orders, lower costs and an edge your competitors will envy.

From a strategic perspective, intralogistics contributes directly to key business metrics. By speeding up internal order processing and reducing errors, companies can improve customer service (e.g., more on-time deliveries, accurate orders) and avoid costly mistakes. By optimizing space utilization and workflow, they can defer expensive expansions and reduce inventory carrying costs.

In short, efficient intralogistics translates into cost savings, protects revenue and positions a business to scale smoothly when demand grows. Just as important, stronger intralogistics can unlock new topline revenue – doing things better, faster and cheaper often opens markets you couldn't serve before. Many businesses now recognize this, treating intralogistics optimization as a strategic investment, not just an operational necessity.

## Designing Facilities Around Flow, Not Just Space

Since one of the core pillars of intralogistics is about the movement and management of goods inside facilities, it heavily influences distribution and fulfillment center design. When designing a new distribution or fulfillment center (or redesigning an existing one), planners must consider how layout, equipment and processes will support efficient internal flows. The goal is simple: products move in straight lines, not zig-zag and back and forth. Every detour costs you time, money and accuracy.

In a well-designed distribution or fulfillment center, products flow logically from one process to the next with minimal delay or backtracking – from receiving docks through storage areas to picking stations and finally to shipping docks.

Effective intralogistics design touches every phase of facility planning. In practice, this means optimizing the floor plan and storage configurations, selecting appropriate material handling systems and ensuring all components (people, equipment and software) work in harmony. For example, designers must plan the placement of storage

racks, A-frame picking technologies, conveyor lines and sorting systems to minimize travel distances for goods and workers, eliminating unnecessary movements. Similarly, ergonomic picking areas should position high-volume SKUs for easy access (reducing picker fatigue and errors), which is an intralogistics consideration.

These design principles integrate intralogistics systems like conveyors, fork trucks, AMRs, AGVs, robotics (for picking and palletizing, as well as mobile collaborative robots) and high-density storage into facility layouts for maximum efficiency.

Beyond current considerations, your design better flex with tomorrow's unknowns. Volume spikes, new product lines or the next big shift will test your layout. This could involve building in space for expansion or using modular automation that can scale up. For instance, as volume increases, proper planning allows you to add more units later to an automated sortation system, an automated packaging solution or a fleet of autonomous mobile robots (AMRs). A well-thought-out intralogistics design will enable a distribution or fulfillment center to handle today's requirements efficiently while adapting for tomorrow's needs.

Finally, intralogistics must guide facility infrastructure choices. Decisions about the number and size of loading docks, the width of aisles, ceiling height (for AS/RS, high-density storage, mini-loaders, vertical lifts, carousels) and even building higher level floor loading (to support heavy automated equipment) all tie back to intralogistics strategy.

For example, highly automated operations might prioritize narrow aisles and tall racks to maximize space usage, whereas a manual operation might need wider aisles for forklifts. Each design decision feeds into how smoothly goods flow internally.

In summary, good distribution and fulfillment center design starts with the processes – then builds the physical facility around them. When the layout, equipment and flow support how the work actually needs to happen, you get the throughput, efficiency and customer performance the business demands.

## The Tech Backbone that Drives Efficiency Today

Modern intralogistics manages all internal processes involved in moving, storing and handling goods inside the four walls of a facility. It can be entirely manual or heavily automated. In fact, world-class manual intralogistics is the foundation for any automation decision. Only after optimizing core processes does it make sense to evaluate what software or hardware add value.

When companies choose to introduce technology, several systems can support and enhance those internal processes. On the software side, a Warehouse Management System (WMS) is often the central brain of intralogistics. It tracks inventory locations, directs putaway and picking tasks, and maintains real-time information on stock levels and order status. Many distribution/fulfillment centers also use a Warehouse Control System (WCS) or Warehouse Execution System (WES) to orchestrate automated equipment – these software systems communicate with conveyors, sorters and robots to control the movement of goods. Integration between WMS/WCS and higher-level systems (like ERP or order management) makes sure information flows in parallel with goods, providing end-to-end visibility and traceability.

On the ground, intralogistics may involve nothing more than disciplined manual handling or may use material handling equipment like conveyors, robots, forklifts – all working in sync. The choice of technology depends on the operation's needs (volume, product type, labor costs, etc.), but common intralogistics technologies include:

- **Conveyors and sortation systems:** Motorized conveyor belts and roller conveyors move items along fixed paths through the distribution/fulfillment center – for example, transporting cartons from picking areas to packing stations or sorting parcels by destination. Automated sortation systems (using barcode scanners and pushers or tilt trays) can rapidly direct items into the correct shipping lanes. These systems reduce manual carrying and sort errors, especially in high-volume fulfillment centers.
- **Automated storage and retrieval systems (AS/RS):** These mechanized systems store and retrieve goods, often in pallet storage or small parts operations. For pallets, AS/RS typically uses stacker cranes that run up and down aisles to deposit or retrieve pallets from high-bay racks. Small items (totes or bins) use technologies like shuttle systems or carousels. AS/RS greatly increases storage density (using vertical space) and speeds up internal putaway and retrieval cycles.
- **Autonomous mobile robots (AMRs) and autonomous guided vehicles (AGVs):** Self-driving robots are increasingly deployed for internal transport tasks. They can carry totes or pallets along the distribution/fulfillment center floor, delivering goods from one zone to another without human intervention. For example, AMRs might bring inventory to a picker (“goods-to-person” systems as seen in some eCommerce distribution/fulfillment centers), or tow trains of parts between a distribution/fulfillment center and a production line in a factory. These robots navigate via sensors and facility maps, working safely alongside people and equipment.

- **Picking assistance technologies:** Since order picking is often the most labor-intensive part of intralogistics, technologies like pick-to-light (where lights indicate the item and quantity to pick at storage locations) and voice-directed picking (where workers wear headsets and receive voice instructions) streamline manual picking processes. Some facilities even use augmented reality (AR), guiding workers via smart glasses. Additionally, collaborative robots (cobots) can help pick and pack – for instance, robotic arms can handle heavy lifting or repetitive motions, working side by side with human staff to improve ergonomics and productivity.
- **Industrial IoT and sensors:** Intralogistics has benefited from Internet of Things technology that connects sensors and devices to the distribution/fulfillment center's network. These include barcode/RFID scanners that track items, weight scales and dimensioners for parcels, and environmental sensors (e.g., temperature monitors in cold storage). IoT devices feed data to the WMS/WCS, enabling real-time monitoring. For example, forklifts may be equipped with telematics and location trackers as part of a fleet management system to optimize their usage and routes. Similarly, automated equipment continuously reports status for real-time visibility and proactive maintenance.
- **Safety and supporting technology:** Given the interplay of people and machines, intralogistics employs technologies to maintain safety and efficiency. This includes automatic shut-off sensors on robots (to prevent collisions), wearable devices for workers that alert if they enter a restricted machine zone and labor management systems that monitor work rates and help balance workload among staff. Additionally, analytics and simulation tools are used behind the scenes – data analytics can identify bottlenecks or predict where to reslot inventory, and simulation software models distribution/fulfillment center flows before implementing changes.

From a technical perspective, intralogistics is trending toward automation and digitalization, sometimes referred to as “smart warehousing.” However, it’s rarely about automating everything; it’s about finding the right mix of technology and human labor to optimize performance. Even highly automated facilities still depend on people. Robots don’t manage exceptions or improve processes, people do.

The technologies above operate as an ecosystem: software directs hardware, hardware moves goods and people provide oversight and deal with tasks that are still best done manually. This carefully orchestrated environment enables distribution/fulfillment centers to achieve throughput and accuracy levels required in today’s fast-paced logistics sector.



## Why Intralogistics Is a Boardroom Issue

Implementing strong intralogistics practices is a strategic imperative in the modern logistics landscape. Efficient intralogistics directly impacts a company's bottom line and customer satisfaction. For instance, by streamlining internal processes, companies can fulfill orders faster and more reliably, which in turn keeps customers happy and willing to continue business. In an era of next-day and same-day delivery expectations, the speed at which a distribution/fulfillment center can pick, pack and ship orders (i.e., its intralogistics efficiency) has become a competitive differentiator.

Cost optimization is another strategic angle. Running a distribution or fulfillment center isn't cheap — labor, space and inventory bleed money fast if intralogistics isn't tight. Intralogistics improvements — such as better slotting of products, reducing travel time through smart layout or introducing automation to cut labor hours per order — directly reduce these costs. Even small efficiency gains per task can translate to significant savings at scale.

If you still see intralogistics as just a cost center, you're already falling behind. Leaders invest here because it pays back fast. Research (and our firsthand experience) shows that effective logistics (including intralogistics) can enable revenue. By reducing costs and errors while improving service, companies can drive customer loyalty and open up capacity to handle more sales. Thus, beyond minimizing logistics costs, optimizing your intralogistics provides value and competitive advantage.

At its core, intralogistics is your shock absorber. If you're not resilient and agile here, the whole supply chain rattles. As supply chains face uncertainties (from sudden demand spikes to disruptions like pandemics or supply shocks), having flexible and well-controlled internal operations allows a company to adjust more quickly. For example, a robust intralogistics setup might enable rapid reallocation of inventory between regions or quick configuration of the distribution/fulfillment center to handle a new product line, whereas a less organized operation would struggle.

When disruption hits (as it inevitably will), flexible intralogistics decides whether you're scrambling — or seizing new market opportunities. Additionally, the push for sustainability in supply chains highlights the importance of intralogistics — efficient internal processes tend to generate less waste (e.g., less unnecessary movement, lower energy usage with smart automation, fewer damages to products), contributing to a company's overall sustainability goals.

Finally, intralogistics strategy closely ties with customer experience in sectors like retail and eCommerce. Distribution/fulfillment center operations directly affect metrics like order cycle time (the time from order placement to shipment) and order accuracy. Strategically, many companies now market fast and accurate delivery as a selling point – think of Amazon’s same-day deliveries or a retailer guaranteeing store delivery within hours. Intralogistics excellence fundamentally enables these capabilities.

In essence, a company’s intralogistics performance often becomes a customer-facing attribute, even if customers don’t see the behind-the-scenes details. We advise clients from a strategic perspective for this reason: investing in the right distribution/fulfillment center design and internal systems positions the company to offer better service and adapt to future challenges.

In summary, intralogistics is strategically important because it drives efficiency, cost-effectiveness, agility and service quality. With roughly 75-80% of facilities still running without automation, many companies still treat the distribution center as a cost center rather than a source of cost reduction or even topline growth. World-class intralogistics helps change that mindset by enabling better performance at lower cost, giving companies the ability to meet new customer demands that generate additional topline revenue.

## Steps, Pitfalls and Best Practices for Execution

Implementing or improving intralogistics in a distribution/fulfillment center involves careful planning and execution. Whether you’re building a new facility or retrofitting an old site, the same rule applies: careful planning beats expensive mistakes.

- **Assessment and data analysis:** The first step is often to analyze the current or expected workflow. This includes gathering data on inventory profiles (SKU dimensions, weights, turnover rates), order patterns and process times. Modern tools like simulation software or throughput modeling can predict how different intralogistics setups will perform. For instance, before deciding on an automation solution, engineers will simulate order picking volumes to see if a conveyor system or a fleet of robots yields better efficiency. A thorough upfront analysis ensures that the intralogistics design (equipment and processes) matches well with your business requirements.
  - In several scenarios, assessment and data analysis is not the first step. For example, clients might have no frame of reference for efficient operations in a greenfield facility that serves a new type of distribution operation.

Best practice calls for a sensitivity analysis in conjunction with running manual operations for some period of time (say two years). Then you would compare the baseline current scenario to improvements possible via further intralogistics refinement, including better manual processes and automation technologies.

- **Planning the layout and systems:** Next comes detailed design – determining the optimal layout of storage, material flow paths and support areas. Planners decide on questions like: What storage medium is appropriate (high-bay racks, shelving, bin storage, etc.)? Where should fast-moving items be stored for quick access? Do we need conveyor lines connecting zones, or is manual forklift transport sufficient? Companies often break this down into conceptual design followed by detailed engineering. At the conceptual stage, they might compare multiple intralogistics concepts (e.g., a manual option vs. a semi-automated vs. a fully automated design) along with cost-benefit analyses for each. Once teams choose a concept, detailed engineering specifies exact equipment models, software requirements and physical dimensions. Importantly, planning should also account for future growth or changes – for example, designing a mezzanine or reserving floor space so that new automation can be added later without major upheaval.
- **Technology integration:** Every intralogistics project comes down to one thing: making all the tech talk to each other. This could involve hooking a new automated system into the existing WMS, or ensuring different vendors' equipment can communicate. A common challenge is software integration and data migration – e.g., moving from a manual system to a new WMS requires migrating inventory data and training staff on the new interface. Experts note that while integration is complex, it can be managed with careful planning and by choosing compatible systems; if a company already has some warehouse software in place, adding new automation can often be done smoothly via middleware or APIs. Planning for downtime or running pilot tests in a “sandbox” environment helps iron out integration issues before going live.
- **Phased implementation:** If you're upgrading a live site, don't flip a switch – phase it in or you'll grind operations to a halt. Shutting down operations for a huge overhaul is usually impractical. Instead, install new systems in parallel or gradually automate one process at a time. For example, a distribution center might first automate its packing and sortation area while keeping picking manual. The center would introduce picking robots once the first phase is stabilized. This phased approach minimizes disruption. With careful scheduling and transitional planning, automation providers can add automation to an existing brownfield facility without disrupting operations. And companies sometimes can realize the advantages of any new automated systems (such as

improved storage density or throughput) by leveraging partial go-lives even before the full project is complete.

- **Change management and training:** Don't underestimate the people side. You can buy robots, but if your team resists, the project fails. New processes or technologies require workforce training– from learning to operate new devices (like handheld RF scanners or forklift tablets) to understanding new workflow sequences. The goal is to ensure staff embrace the changes rather than resist them. Good implementation plans include robust training programs and sometimes overlap periods where old and new processes run concurrently so people can get up to speed. It's also crucial to communicate the purpose of changes to employees (for example, explaining that an automated picker will alleviate their repetitive tasks and not threaten their job security). Involving staff in the design/testing phases can improve adoption and surface practical issues early.
- **Testing and continuous improvement:** Before declaring an intralogistics implementation complete, teams must test extensively (e.g., of WMS functionality, conveyor routing logic, robot navigation). This might happen during a formal commissioning period for automation, where companies run the system to ensure it meets performance specs. Even after go-live, the work isn't over – intralogistics thrives on continuous improvement. Managers should monitor KPIs like order processing time, pick rates, error rates and equipment uptime. Using these metrics, they can tweak processes or system parameters. For example, if a certain aisle is consistently a bottleneck, managers might reslot some products or adjust the staff allocation in that zone. Intralogistics implementation is an ongoing cycle of improvement, not a one-time project.

It's worth noting that implementation strategies differ for greenfield projects (new distribution/fulfillment centers) versus brownfield retrofits. Greenfield sites offer more freedom to design the "ideal" intralogistics system from scratch, potentially achieving very high efficiency from day one – but they require larger upfront investment and longer lead times to build. Brownfield upgrades have to work within existing constraints (building size, current operations) and typically focus on high-impact improvements that justify the complexity of retrofitting.

In either case, strong project management is critical. Timelines, budgets and stakeholder coordination (between internal teams, consultants and technology vendors) must be managed closely. When done right, an intralogistics implementation can significantly boost a distribution/fulfillment center's performance and yield a healthy return on investment within a few years.

## 7 Misconceptions that Hold Companies Back

Many leaders hold misconceptions about the discipline of intralogistics. Below are some of the ones we consistently run into regarding intralogistics and distribution/fulfillment center operations:

- **Misconception 1: “Intralogistics just means automating everything in the distribution/fulfillment center.”**

*Clarification:* Automation does not equal intralogistics. While automation can be powerful, it's not always necessary or cost-effective to automate every process. Sometimes it's smarter slotting and shelving, not just another robot. Some operations benefit more from partial automation or improved manual processes. Fully automated systems are not a one-size-fits-all solution – a small distribution/fulfillment center with limited SKUs might run most efficiently with well-organized manual processes or a few targeted automated aids, rather than an expensive fully automated system. Intralogistics is about optimizing internal flows, which could mean conveyors and robots in one context, or better scheduling in another. The key is to apply the right level of technology and process improvement for the specific situation.

- **Misconception 2: “If we do invest in automation, it has to be all at once (and will cause major downtime).”**

*Clarification:* Companies often fear that upgrading intralogistics (especially adding automation) will be an all-or-nothing, massively disruptive project. In reality, gradual and modular implementation is common and often preferable. Modern intralogistics solutions are increasingly modular – for example, you can add a few autonomous forklifts to work alongside human-operated ones or implement a conveyor loop serving one part of the distribution/fulfillment center first. This incremental approach avoids long shutdowns. Experience from industry projects shows that even substantial automation can be phased in while the facility continues running. Good planning (often scheduling installation in off-hours or less busy seasons and creating temporary workarounds) can enable a smooth transition rather than a big-bang cutover.

- **Misconception 3: “Automation will make us lose control over operations.”**

*Clarification:* There is a perception that once you automate, you're handing over control to machines and opaque software, potentially risking chaos if something malfunctions. In truth, automation tends to increase control and visibility. Automated intralogistics systems come with sophisticated software that provides real-time monitoring of operations. For instance, a WCS can display exactly

where each tote is on the conveyor and alert managers to any blockage, something not easily visible in a manual system. Far from being “black boxes,” these systems often include dashboards with detailed KPIs and visualization of material flow, giving managers more information than they ever had with manual processes. Additionally, automation doesn’t eliminate human oversight – operators and managers remain in control of setting priorities and can intervene when needed. The net effect is typically more control, not less.

- **Misconception 4: “Intralogistics optimization is only for huge or high-tech distribution/fulfillment centers.”**

*Clarification:* Smaller or less complex operations sometimes assume that intralogistics improvements (especially using advanced technology) are only worthwhile for large distribution centers or mega-corporations. In reality, operations of all sizes benefit from intralogistics best practices. For example, a regional distribution/fulfillment center might not need an army of robots, but it can still implement better internal slotting, use a basic WMS for inventory tracking or add simple conveyor segments to reduce walking – all of which improve efficiency. Moreover, automation solutions are increasingly scalable; vendors offer entry-level versions of systems (like a single aisle of AS/RS or a small fleet of two or three robots) that can suit mid-sized distribution/fulfillment centers. The cost of technology has also been decreasing, and even modest investments can have quick payback by cutting labor and error costs. Intralogistics isn’t just about cutting-edge automation; it’s fundamentally about process improvement, which applies universally. Companies of all sizes that embraced intralogistics improvements have seen better space utilization and throughput, debunking the myth that it’s only for the “big guys.”

- **Misconception 5: “Automation will replace human workers entirely.”**

*Clarification:* This is a prevalent fear – that robots and automated systems will make distribution/fulfillment center jobs obsolete. In reality, while automation handles many repetitive or heavy tasks, human workers remain essential. Automation often changes jobs rather than eliminating them: for instance, instead of manually hauling pallets, a worker might supervise automated pallet shuttles, handle exceptions or focus on value-added tasks like quality control. Automation and robots don’t just cut costs – they save backs, knees and miles of walking. Industry experts consistently find that automated logistics systems work best with humans in the loop, and that new technology creates demand for new skills (like managing robots or analyzing system data) rather than simply causing layoffs. In fact, many distribution/fulfillment centers face labor shortages, and automation can support workers on tasks that are hard to staff. Instead of layoffs, companies often retrain and elevate existing employees to more supervisory or technical roles. So, the notion of dark, “lights-out” distribution/fulfillment

centers with no people is more hype than reality in most cases – people remain at the heart of intralogistics, working alongside technology.

- **Misconception 6: “Our operation is running fine – intralogistics improvements won’t make a big difference.”**

*Clarification:* Executives love to say, “If it isn’t broken, don’t fix it.” But the truth is, inefficiency is breaking you every day – you just don’t see the cracks.

Businesses that have “always done things a certain way” breed complacency, which can be fatal. In practice, even if orders go out on time, almost every distribution/fulfillment center has opportunities for improvement. Any operation can reduce wasted travel, improve space use or cut error rates. Continuous improvement is a core philosophy of intralogistics. Techniques from methodologies like lean logistics can eliminate many non-value-added activities. Even high-performing distribution/fulfillment centers conduct regular analyses (e.g., using data from the WMS) to find bottlenecks or to reoptimize pick routes and inventory layout. As demand patterns change, so should operations. The misconception that “if it isn’t broken, don’t fix it” can cause companies to miss significant savings or performance gains. In competitive sectors, those that continually refine their intralogistics leap ahead of those that stand still.

- **Misconception 7: “Implementing intralogistics systems is too expensive and the ROI is uncertain.”**

*Clarification:* Executive teams often express sticker shock at the upfront cost of new distribution/fulfillment center technologies or redesign projects. However, return on investment (ROI) and long-term benefits are key. Many intralogistics automation projects pay for themselves in a few years by saving labor, increasing throughput and reducing errors. For example, an automated sortation system might drastically reduce the number of staff needed for outbound sorting and eliminate missorted shipments (which are costly), yielding ROI within three to five years. Additionally, not upgrading could cripple competitiveness – slower deliveries mean fewer sales. And paying premium shipping is expensive. The sticker shock misconception comes from viewing the investment in isolation. When analyzed properly (factoring in all savings and revenue improvements), intralogistics enhancements are frequently one of the highest-impact investments a logistics operation can make. They are indeed investments in future capacity and quality, not just expenses. Naturally, careful analysis must justify each project, but dismissing improvements outright due to cost can be short-sighted.

## Why Intralogistics Is the Backbone of Supply Chain Success

Intralogistics is a critical component of distribution/fulfillment center operations and the broader supply chain, encompassing inside-the-four-walls processes that move and manage goods. Companies across retail, eCommerce, manufacturing and distribution can gain major technical and strategic advantages when they understand intralogistics and invest in optimizing it.

From a technical standpoint, intralogistics blends sophisticated software, automated equipment and human labor to handle internal flows quickly and accurately. Strategically, it is a linchpin for efficiency, customer service and adaptability in a fast-changing market. Implementing intralogistics improvements requires thoughtful design and change management, but it can be approached in phases and scaled to any operation's size.

Intralogistics is the critical bridge between what comes in your door and what goes out to your customers. When it's optimized, your distribution or fulfillment center stops being a storage building and becomes a high-performance hub – one that fuels speed, accuracy and growth. Get intralogistics right, and you're not just moving goods or materials; you're building a strategic asset that strengthens your entire supply chain. Ignore it, and you're leaving efficiency, resilience and customer satisfaction on the table.