6 Key Points for the Future of Intralogistics

For many years, intralogistics has been essential in the supply chain, managing and optimizing the flow of goods through key technological tools. Today, these internal processes continue to stand out for their competitiveness. However, their evolution and improvement require ongoing transformation within short timeframes.



In response to these demands, we've compiled the 6 key points that will shape the Future of Intralogistics. We are confident the insights shared by our CEO, Karolina Pulido, during the recent "Resilience and Innovation in the Future of Intralogistics" conference at The Logistics World will provide valuable takeaways. Let's get started!

How Can You Prepare for the Future of Intralogistics and Optimize Your Processes?

Intralogistics encompasses everything from receiving raw materials and products, to storage, order picking, inventory control, and reverse logistics management.



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We know that solid, strategic preparation at each of these stages demands effort and poses significant challenges. That's why aligning with highly competitive disruptive technologies that help meet market demands and consumer behavior becomes a key factor on the road to success.

Let's explore the essential pillars of Future Intralogistics:

1. Internet of Things (IoT) and Smart Sensors: Revolutionary technologies like the Internet of Things have significantly transformed intralogistics by enabling unprecedented connectivity between devices and systems. Today, the integration of smart sensors allows real-time monitoring of goods, asset locations, and environmental conditions. These systems can analyze large volumes of data generated by sensors, delivering valuable insights for strategic decision-making, route optimization, and energy efficiency.

This enhanced visibility adds significant value to intralogistics by enabling more efficient resource management and faster incident response. As a result, companies can offer better customer service, meet tighter delivery deadlines, and adapt more swiftly to market demand fluctuations.

From this perspective, we can conclude that IoT emerges with impressive solutions for the supply chain, offering the following key benefits:

- Asset visibility and control
- Downtime reduction
- Stock and maintenance cost optimization
- Supply chain transparency

You might be interested in: IIoT – Connecting Every Node in the Supply Chain

2. Artificial Intelligence (AI): Talking about Artificial Intelligence is no longer new, yet it remains a disruptive, must-have technology for leading industries. According to a report by global strategy consultancy McKinsey & Company, AI implementation has helped companies reduce logistics costs by 15%, optimize inventory levels by 35%, and improve service levels by 65%.

Let's highlight some of its advantages in the intralogistics sector:

- Accurate shipment updates
- Distribution efficiency
- More complex and creative tasks
- Picking and packing optimization
- Process automation and refinement
- **3. Digital Twins and Digital Interaction:** If you've been following our content, you're already familiar with the impact of Digital Twins on logistics efficiency and their importance across multiple industries. This revolutionary technology creates an exact replica of reality, enabling advanced simulations and detailed analyses to optimize processes and support more precise strategic decisions.



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With Digital Twins, it is possible to create an accurate digital copy of any object, project, or physical environment, which facilitates testing, failure identification, and ongoing improvement in intralogistics systems. Additionally, their application enables real-time data visualization and analysis. Key benefits include:

- Cost reduction
- Predictive maintenance
- Process optimization
- **4. Blockchain:** With a focus on automation and efficiency, blockchain stands out as one of the most strategic allies in the evolution of intralogistics, providing a decentralized, transparent, and secure way to manage data and transactions.

The use of this technology has a clear impact on profitability in the intralogistics area. Beyond solving issues of trust and data manipulation, it accelerates processes, reduces risk, and enhances transparency.

Some of its key benefits for the sector include:

- Return verification
- Transparency and traceability
- Sustainability and product tracking
- **5. Big Data and Predictive Analytics:** In recent years, analyzing large volumes of data has become essential for modern intralogistics. Companies leveraging Big Data can anticipate demand, optimize internal transportation routes, and manage inventory more effectively. Thanks to predictive models based on historical and real-time data, decision-making becomes more accurate and operational costs can be significantly reduced.

But what do companies actually gain from implementing this technology?

- Inventory optimization through predictive analytics
- Real-time monitoring to boost operational effectiveness
- Transparency and traceability
- Warehouse automation
- **6. Sustainability and the Environment:** We've reached the final point on our list of crucial factors for success in the future of intralogistics. Last but certainly not least, sustainability is one of the most critical and necessary commitments to address today's environmental demands. Sustainable intralogistics now requires comprehensive energy optimization and proper waste management. Sustainability provides an opportunity to improve operational efficiency and reduce long-term costs—while also protecting the environment. Its core pillars include:
 - Circular economy practices
 - Promoting and enabling automated processes
 - Green supply chain management
 - Renewable energy-based operations
 - Encouraging real sector involvement

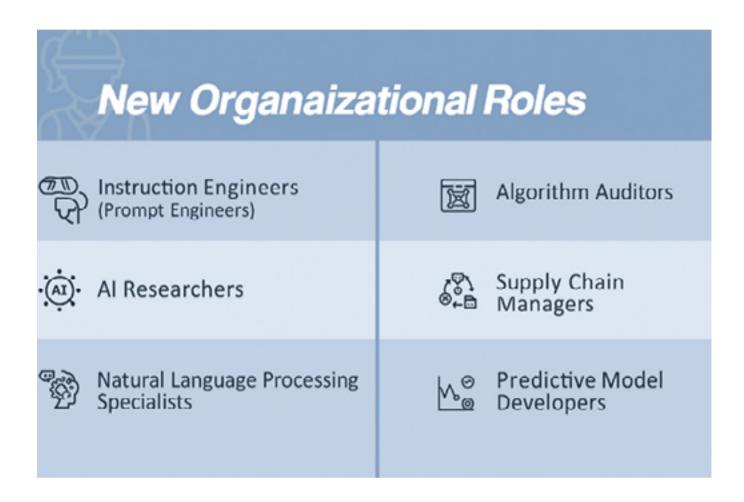


It's essential to understand that without a healthy planet, we won't be able to implement any of the previously mentioned innovations. Sustainability is not optional—it's a necessity for securing a viable future where our actions and projects can thrive.

What Challenges Exist When Implementing These Technologies in Intralogistics?

While these technologies offer unparalleled competitive advantages, they also face constant challenges: the need for workforce training, the creation of new job roles, adaptation to unfamiliar systems, and initial investments that are often not budgeted.

Companies today are facing these and other obstacles in their pursuit of innovative solutions, and the absence of qualified human talent can become a critical gap in achieving their goals.



We know that the challenges may seem overwhelming—and taking action, even more so. But by absorbing valuable information like this, you've already taken the first step that puts you ahead of your competitors. It may seem like there's still a long road to fully adopting these technologies, but the future is approaching rapidly. That's why it is essential to keep a clear and strategic vision for your entire team—because in the end, those who lead with a sustainable and human-centered approach will always remain at the forefront.

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