

Digital Distribution Center on Azure IoT Central



Orchestration across the supply chain is increasingly complex

Multiplication of players, channels, and geographical areas

Growing customer demands of e-commerce

Increasing complexity in retail

Faster, fluctuating demand schedules

Decentralization and outsourcing



And distribution centers remain a primary challenge, especially as populations become more urban



E-commerce and the **need for 1-2 day shipping** is increasing the pressure on distribution centers



Distribution centers must adapt to a **huge influx of returns** that increases the **likelihood of errors and rework**



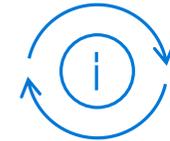
An **overreliance on manual labor** means picking and packing is 55-65% of distribution center costs



Holiday seasons increase distribution center staffing needs by **up to 1,000%**



Distribution Centers are suffering from a **shortage of specialized labor and high turnover**



Scalability and repeatability issues make it hard to propagate new technologies and **adapt legacy systems**



To adapt to new demands, managers must:

Reduce costs

Eliminate redundant, manual tasks by introducing automated processes that increase the speed of forward and backward product flow

Improve productivity

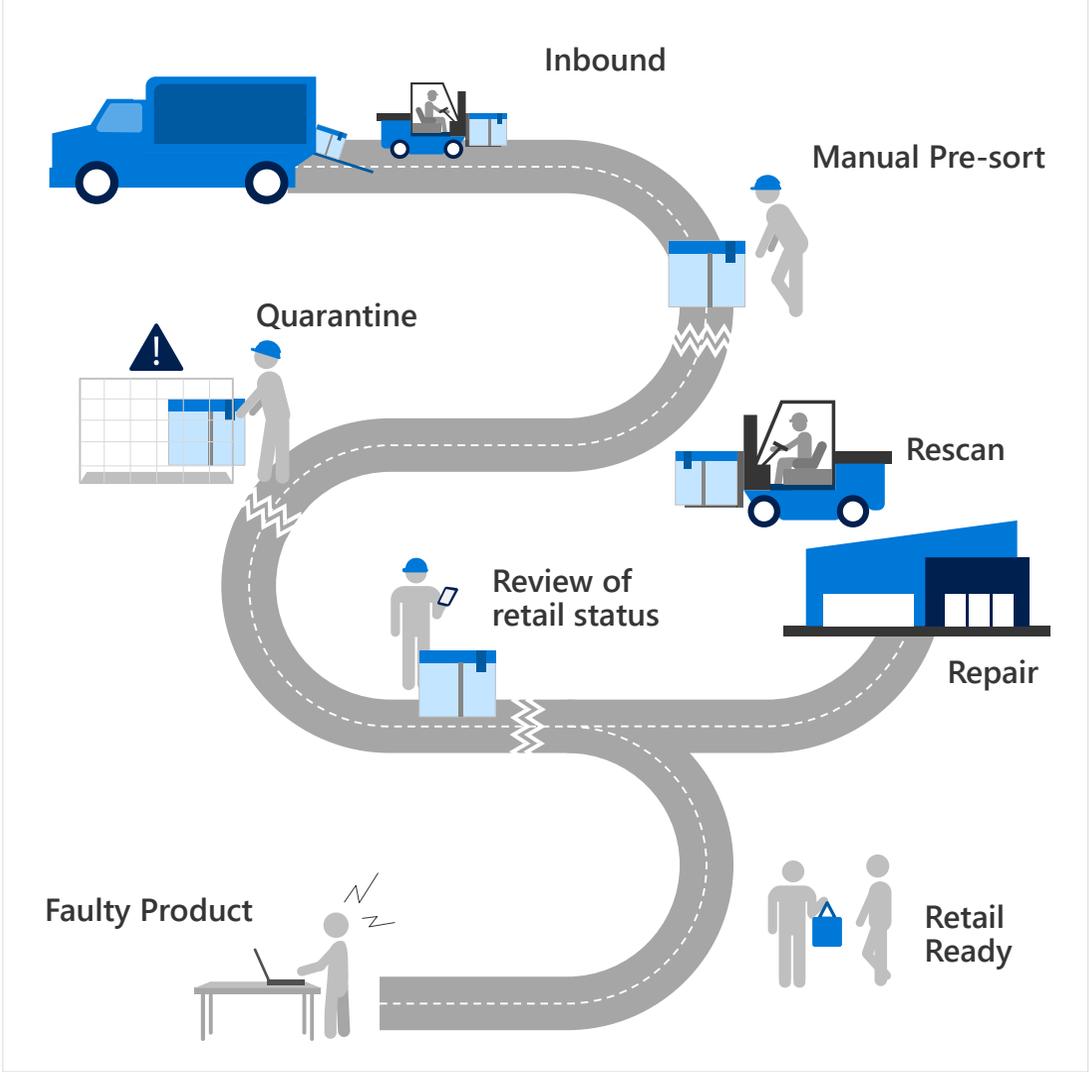
Engage changing workforces by arming supervisors with intelligent tools that promote efficiency, safety, and productivity

Maximize utilization

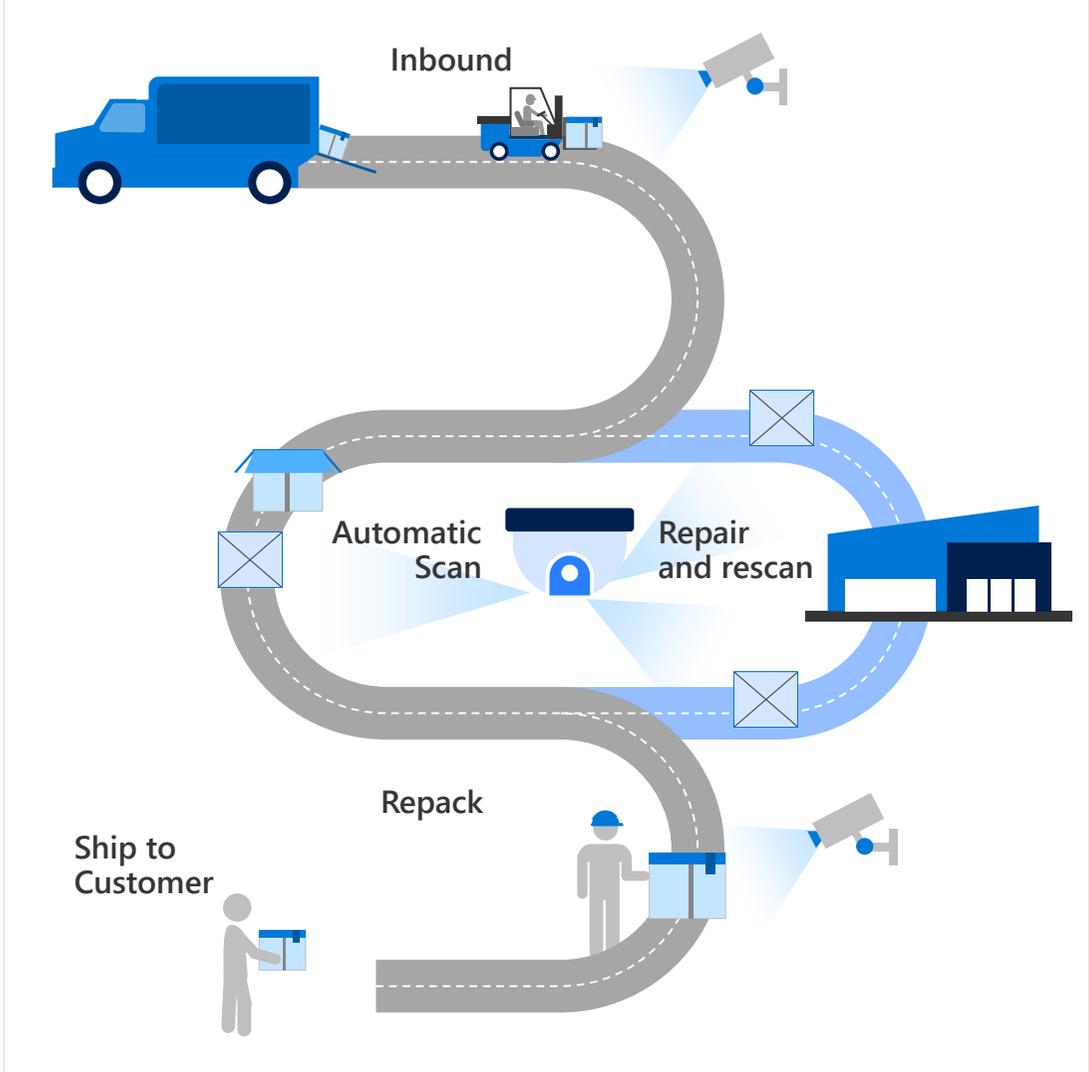
Adapt and scale multiple distribution centers to meet increasingly dynamic markets with enhanced agility

And move towards a cutting-edge distribution center

From slow, manual processes



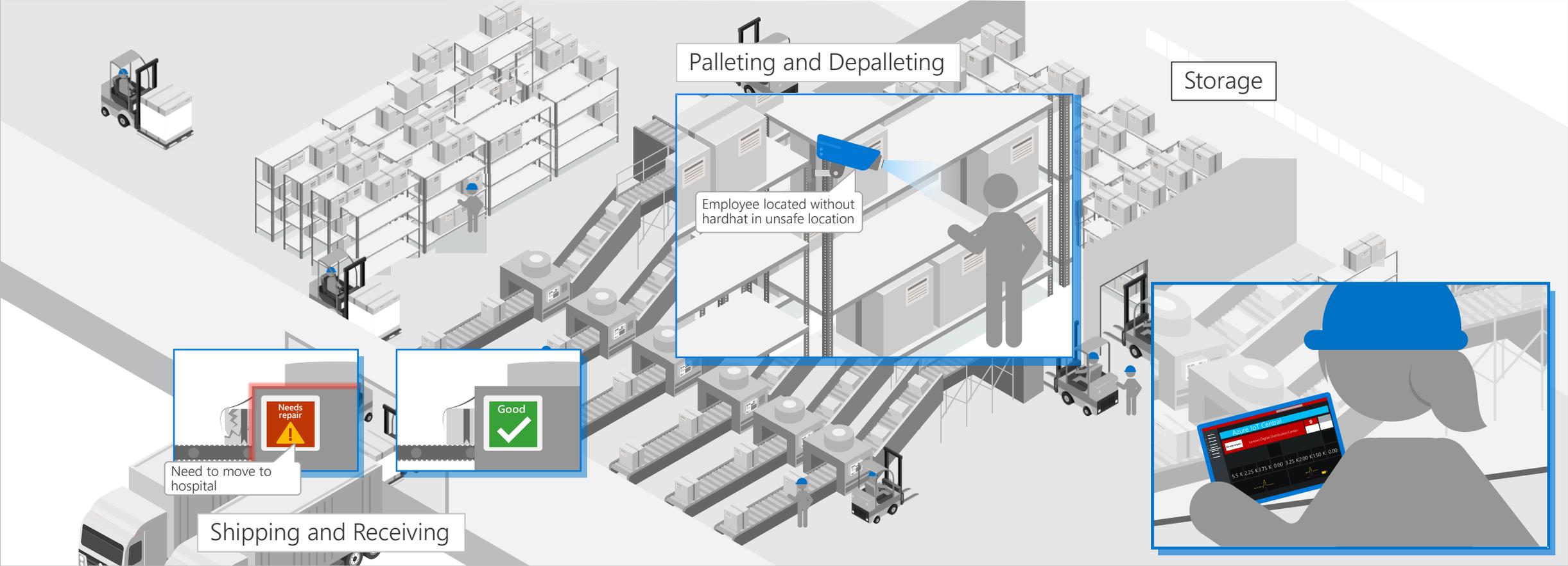
To agile, automated systems





Digital Distribution Center

Start your supply chain transformation with Digital Distribution Center

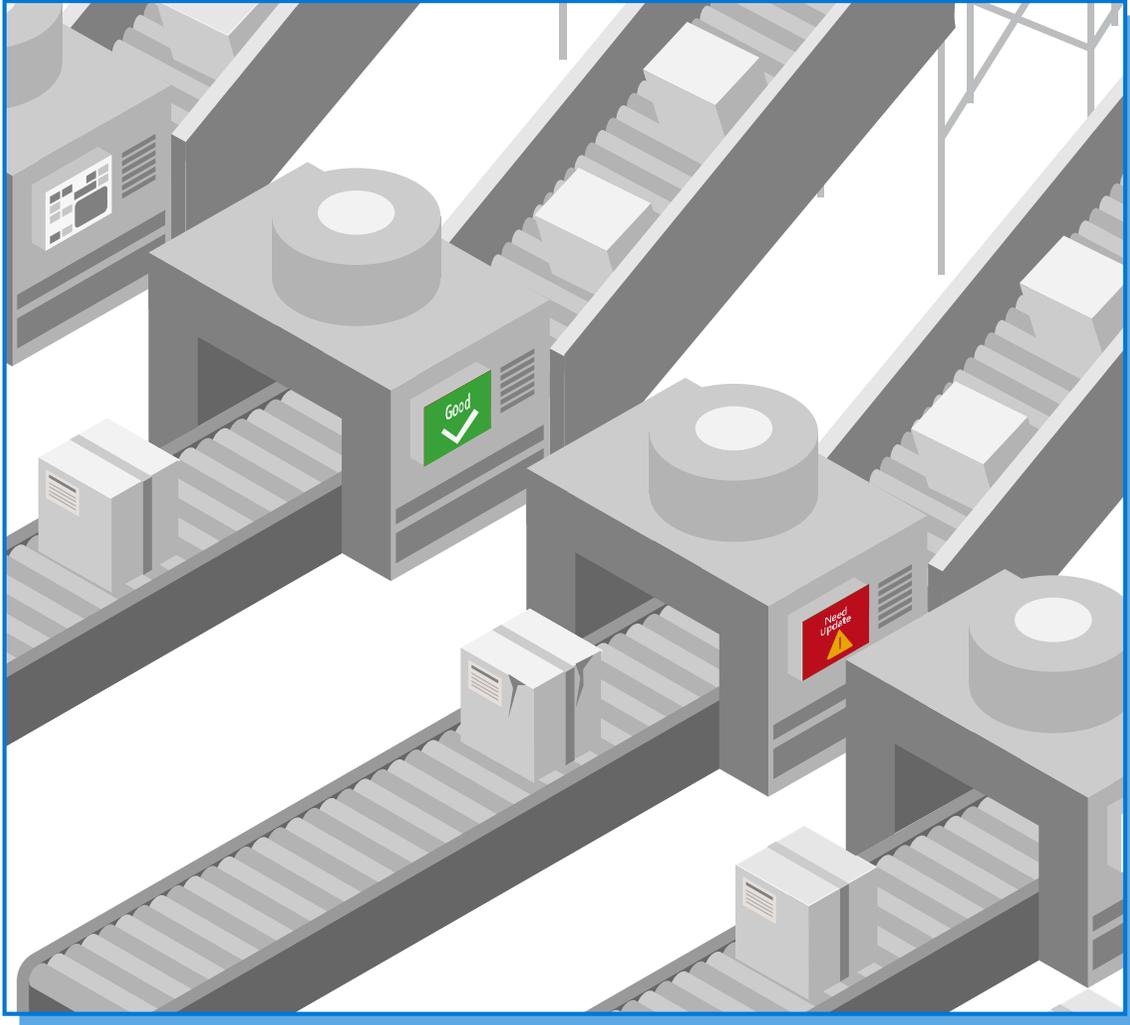


Speed up delivery and eliminate errors

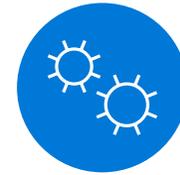
Increase employee productivity and safety

Maximize distribution center effectiveness

Speed up delivery and eliminate errors



Automate redundant, manual tasks



Automatically track and validate package locations and statuses

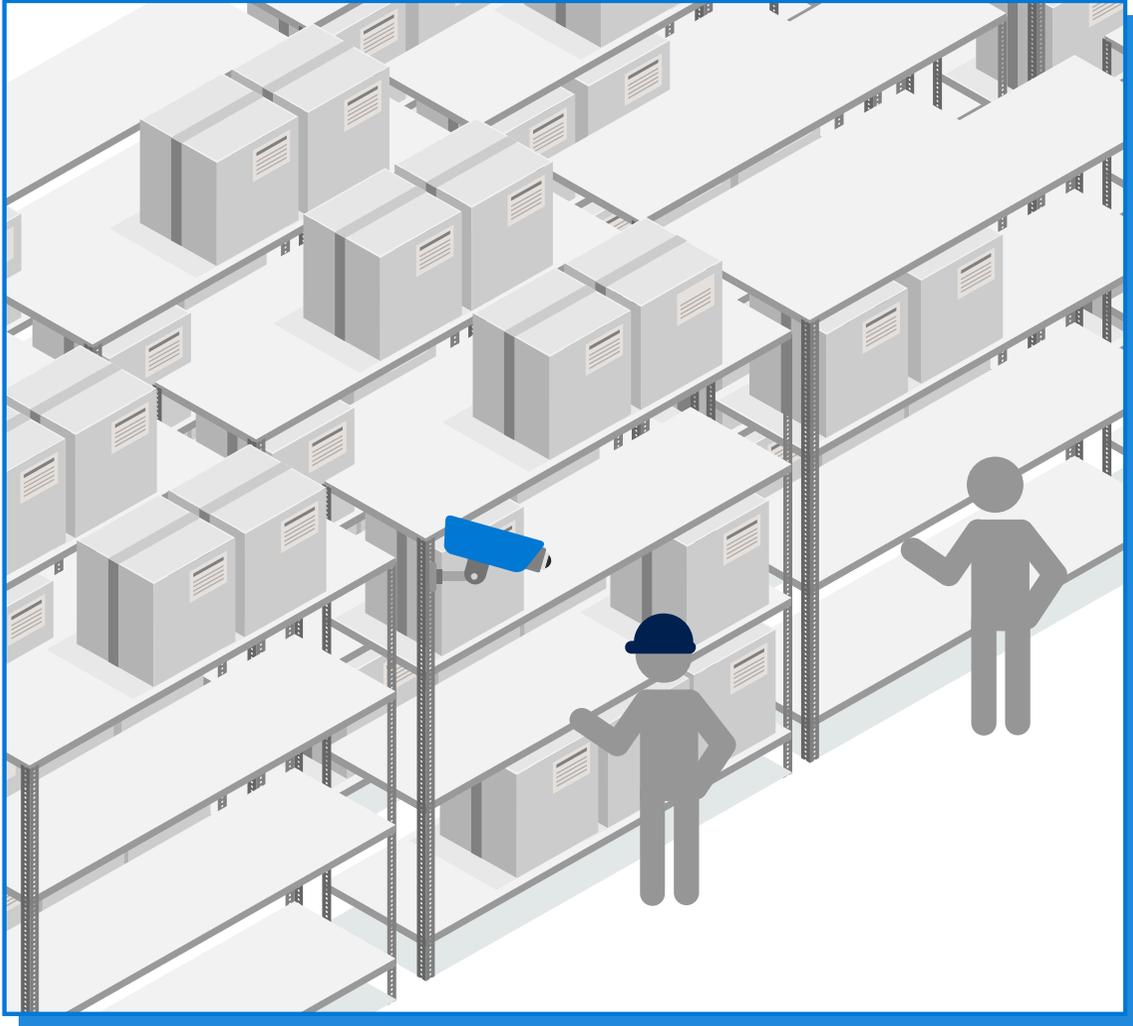


Optimize product flow by streamlining palletization and depalletization



Increase the efficiency of last-mile sorting

Increase employee productivity and safety



Monitor with advanced video analytics



Improve employee safety with geofencing alerts and advanced video analytics



Maximize productivity by automatically monitoring against inefficiencies



Free up employees to focus on strategic rather than rote actions

Maximize distribution center effectiveness



Leverage a comprehensive solution



Enable real-time asset tracking across the distribution center



Stage equipment based on data-driven insights for efficient tool utilization



Reduce implementation time with a scalable solution that enables you to get the most out of your investment

With a scalable solution built by leaders in innovative, IoT-enabled hardware and cloud technology

The Lenovo logo consists of the word "Lenovo" in white, sans-serif font, centered within a solid red rectangular background. A small trademark symbol (TM) is located at the bottom right of the word.

LenovoTM

Transform the distribution center using intelligent hardware connected at the edge to gain valuable insights from Advanced AI and machine learning capabilities.

The Azure logo features a blue icon of a stylized mountain or wave on the left, followed by the word "Azure" in a blue, sans-serif font.

 Azure

Azure IoT Central simplifies the setup of scalable IoT solution and reduces the management burden, operational costs, and associated overhead.

Transforming the retail supply chain

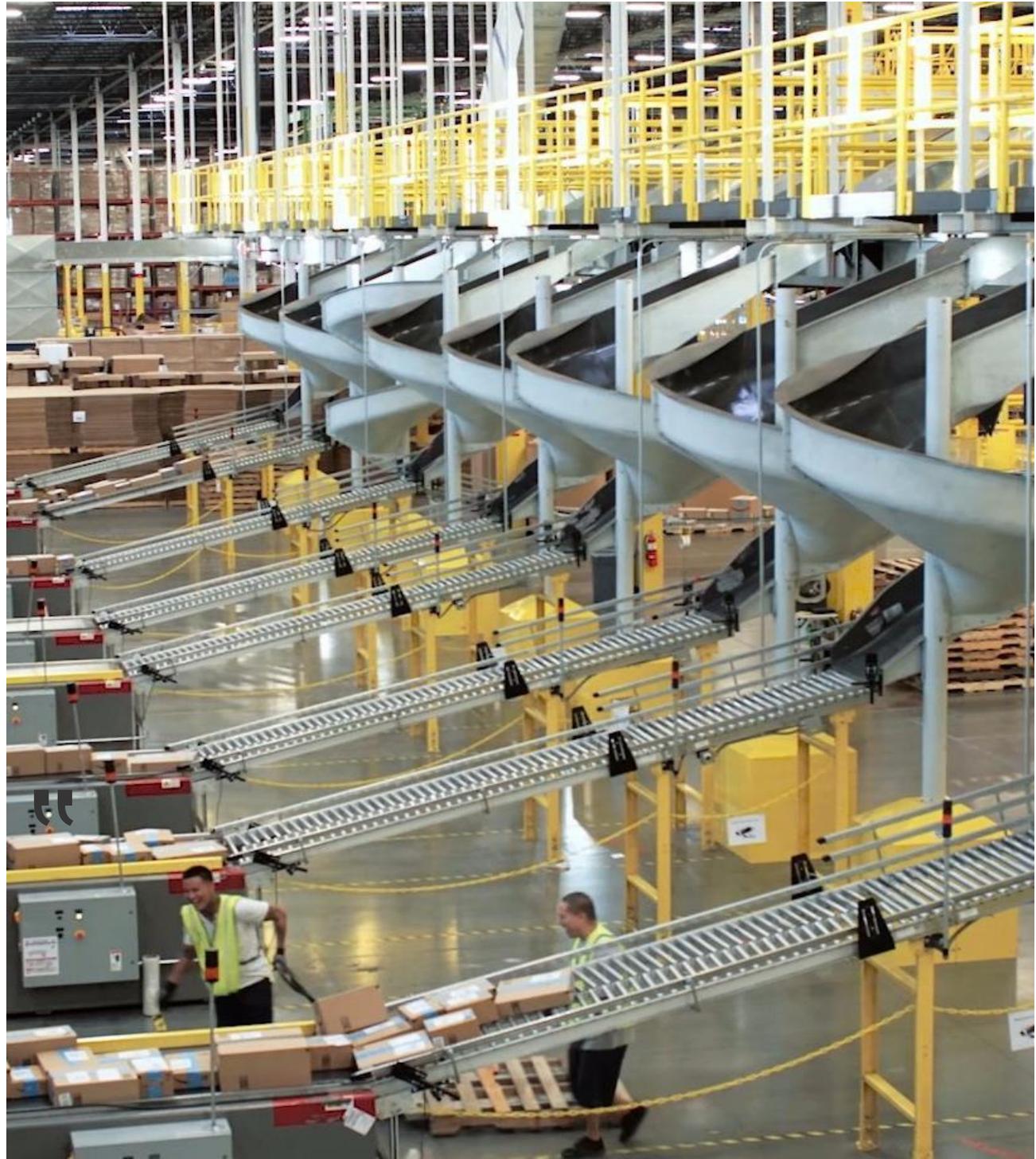
Overcoming inefficiencies with automated processes

Challenge A large online retailer's distribution center lost up to 17% of their margins to human mistakes

Solution They turned to Lenovo to improve the efficiency and performance of their distribution center

Benefits

- Improved performance achievement by contributing to a 30% higher efficiency rate
- Enabled real-time, scalable package detection, tracking, and validation





Enforcing workforce safety and effectiveness

Empowering workers with camera as a sensor

Challenge A large aircraft MFR lost \$1.25M per day for each grounded airplane awaiting maintenance or replacement parts

Solution Lenovo provided real-time Geo-based asset/tools and workforce monitoring capabilities

- Benefits**
- Lenovo's solution enabled efficiencies that resulted in annual savings of \$1.2B
 - Solution increased workforce safety by tracking high-hazard regions, proper safety equipment etc.
 - Solution increased workforce effectiveness by providing loitering alerts and tracking efficiency parameters



Next steps

→ Watch the [Demo Solution Video](#)

- Take a walk-through of the solution to discover more about what Lenovo can offer your business

→ Learn more by visiting our website

- Our perspectives in blogs, videos, and articles
- Customer stories
- Events and webcasts
- Social channels