

IIoT and The Connected Distribution Center

1 RELIABILITY

2 UTILIZATION

3 LABOR/PRODUCTIVITY

IIoT/Industry Stat



IIoT will lead to a **25%** reduction in asset maintenance costs and a **35%** reduction in downtime.¹



30% of c-level execs believe IIoT will **unlock new revenue** from existing products/services.²



Industry **growth outpaces the labor** pool by a ratio of **6 to 1**.³

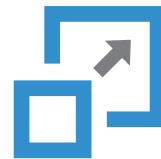
Connected Distribution Center



Increase reliability in a 750k sq. ft. DC, operating **5,200 hours**.



Improve utilization in a 750k sq. ft. DC, operating **5,200 hours**, processing **200 cases** per minute at **\$10 revenue per case**.



Maximize productivity in a DC staffed with **400 employees** across three shifts at a wage of **\$15 per hour**.

The average cost of downtime in a DC is **\$10k** per hour. A **40%** reduction in unplanned outages can result in up to

\$70k in annual labor savings.



A **1%** output increase can result in **\$6 million** in annual revenue gains.



A **10%** reduction in employee turnover rates offers

\$420k in annual savings.



Here's How:



Trim spare parts by **30%** and reduce inventory by **20%** to save **\$140k** annually.

Cut preventive maintenance spend **20-35%** to reclaim **\$40k** annually.

Reduce unplanned downtime by **40%** to achieve

\$70k in annual labor savings.



Combined operational improvements deliver **\$250k** in annual savings.



Detect when systems are underutilized; **uncover root causes** for inefficiencies.

120 additional cases per hour delivers **\$1,200 per hour**, or **\$24k per day**.

Continuously monitor all fulfillment activities; **notify operators** when they are not hitting targeted throughput rates.



Labor **activity analysis** combined with **data model** detects changes in employee performances and behaviors.

Proactively replace at-risk employees to **limit production impacts**.

Supervisors **determine best engagement method** and take the steps needed to **retain key employees**.



1. <https://medium.com/@davidericardo/the-internet-of-things-iiot-in-the-business-world-and-our-lives-f2c78ea0041a>

2. <https://www.forbes.com/sites/patrickmoorhead/2013/11/04/arm-holdings-study-internet-of-things-iiot-is-closer-than-you-might-think/#46edb0ca5190>

3. <https://www.datexcorp.com/labor-shortages-in-the-supply-chain-workforce>