LOCUS ROBOTICS

EBOOK

Run Your Warehouse Without Slowing Down

Maintain Throughput When the Plan Breaks

How to maintain pick rate, flow, and throughput when conditions change

The Operating Environment Has Changed

Warehouse operations used to follow a plan.

- Forecast volume
- Staff the building
- Run peak
- Reset

That plan doesn't hold the way it used to.

That model worked when demand was predictable, and labor was stable. Most operations no longer have either.

When the plan breaks, the impact is immediate.

- Pick rate drops
- Pack starts to back up
- The dock falls behind

And once flow slows down, it's difficult to recover within the same shift.

Volume shows up without warning. Order mix shifts mid-shift. SKU counts expand. Delivery expectations tighten.

You see it on the floor right away:

- Pick paths change constantly
- Travel increases
- New associates slow down experienced teams
- Pack stations start to back up

72%

of consumers shop online multiple times per month

41%

shop weekly

38%

make buying decisions within 48 hours

Those decisions don’t stay upstream. They land directly in your operation.

That means the pressure doesn’t build gradually. It hits all at once — on the floor, during the shift.

Uncertainty is no longer something you plan around. It’s something your operation has to absorb without slowing down.

Demand is Only Half the Pressure

Volume gets the most attention, but labor is just as disruptive.

Most operations are dealing with:

- Call-outs and no-shows
- Constant onboarding and retraining
- Shifts with fewer experienced associates

That shows up in performance:

- Pick rates fluctuate
- Errors increase
- Throughput becomes harder to predict

Even strong teams feel it when everything moves at once:

- Volume spikes
- Labor drops
- SKU mix shifts toward harder-to-pick items
- SLAs tighten

This is where things start to break down.

Pick falls behind.
Pack gets buried.
The dock backs up.

Not because teams aren't capable, but because the system depends too much on conditions staying stable.

Confidence today means keeping the operation moving when those conditions don't hold.

Operational Confidence on the Floor

> Volume gets the most attention, but labor is In stable environments, efficiency is enough. In today's environment, you also need reliability.

At Locus Robotics, we call this Operational Confidence — the ability to maintain performance when inputs change.

On the floor, that looks like:

- Pick rate holding steady across shifts
- Work getting rebalanced in real time when labor drops, so zones don't stall when part of a shift is short
- Bottlenecks contained before they spread
- Supervisors seeing issues early and adjusting

This isn't about eliminating disruption. That's not realistic anymore.

It's about controlling how disruption impacts the operation.

Operations that build this capability focus on:

- Systems that adjust in real time — redistributing picks, reassigning work, and keeping flow steady across zones
- Visibility into what's actually happening on the floor
- The ability to shift work without stopping the operation or creating downstream bottlenecks

> **The goal is simple: keep the floor moving, even when the plan doesn't hold.**

Where Traditional Models Start to Break

Most warehouse systems were built around predictability.

They assume:

1. Stable labor
2. Known order profiles
3. Repeatable workflows

That's where the strain shows up.

Manual processes can adapt, but they rely on people walking more, moving faster, and constantly adjusting.

Rigid automation performs well — until something changes. Most shifts don't go exactly to plan.

When both demand and labor shift at the same time, the impact compounds:

1. Pick falls behind
2. Pack gets overwhelmed
3. Inventory flow slows down
4. Everything starts backing up

What starts as a delay in one area doesn't stay there.

- Slower picking creates pressure at pack.
- Pack delays push congestion to the dock.
- Small disruptions turn into full-shift slowdowns.

Flexibility-first automation takes a different approach.

Instead of locking work into fixed paths, it allows operations to:

- Reassign work dynamically
- Adjust workflows without downtime
- Scale capacity without redesign

This isn’t about adding more automation. Most operations try to solve variability by optimizing individual steps — picking faster, adding labor at pack, adjusting waves.

That works when problems are isolated.

It breaks when everything changes at once.

When picking, putaway, and inventory flow aren’t aligned, improving one area often creates pressure somewhere else.

It’s about building a system that can handle variability without losing flow.

From Tasks to Fully Autonomous Fulfillment

The biggest shift in automation is not just replacing individual tasks.

It's removing the dependency on labor to keep those tasks moving in the first place.

That's where fully autonomous fulfillment comes in.

With a coordinated system that includes:

Locus Origin
supporting high-volume picking with less travel

Locus Vector
handling transport and heavier movement across workflows

Locus Array
enabling Robots-to-Goods (R2G) automation across picking, putaway, and inventory handling

Operations move beyond isolated improvements.

They gain a system that executes core fulfillment work autonomously, without waiting on available labor to keep picking, putaway, and inventory moving

Orchestrated through LocusONE™, this system:

- Balances work across workflows in real time
- Keeps inventory flowing between processes
- Maintains throughput even when labor fluctuates, so fulfillment rates don't drop even when headcount does

For operators, the difference is clear:

- Picking doesn't fall behind when headcount drops
- Putaway keeps pace, so inventory stays accessible
- Work continues moving without constant manual intervention

When conditions change mid-shift, the operation doesn't slow down or reconfigure manually.

Work continues moving at a consistent pace, without relying on additional labor to recover. This is what stabilizes the operation.

Because the system — not the labor plan — keeps fulfillment moving.

That changes how the operation performs under pressure.

Not a faster process in one area, but a system that keeps everything connected and moving.

In traditional environments, throughput is tied to how many people are available, but in a fully autonomous fulfillment model, throughput is tied to system capacity.

The advantage is not a single task being automated. It's the operation continuing to run without depending on perfect conditions.

What Changes in a Fully Autonomous Fulfillment Model

- Throughput is tied to system capacity, not headcount
- Picking, putaway, and inventory flow stay aligned
- Bottlenecks are absorbed before they spread
- Performance stays consistent across shifts

Designing for What Comes Next

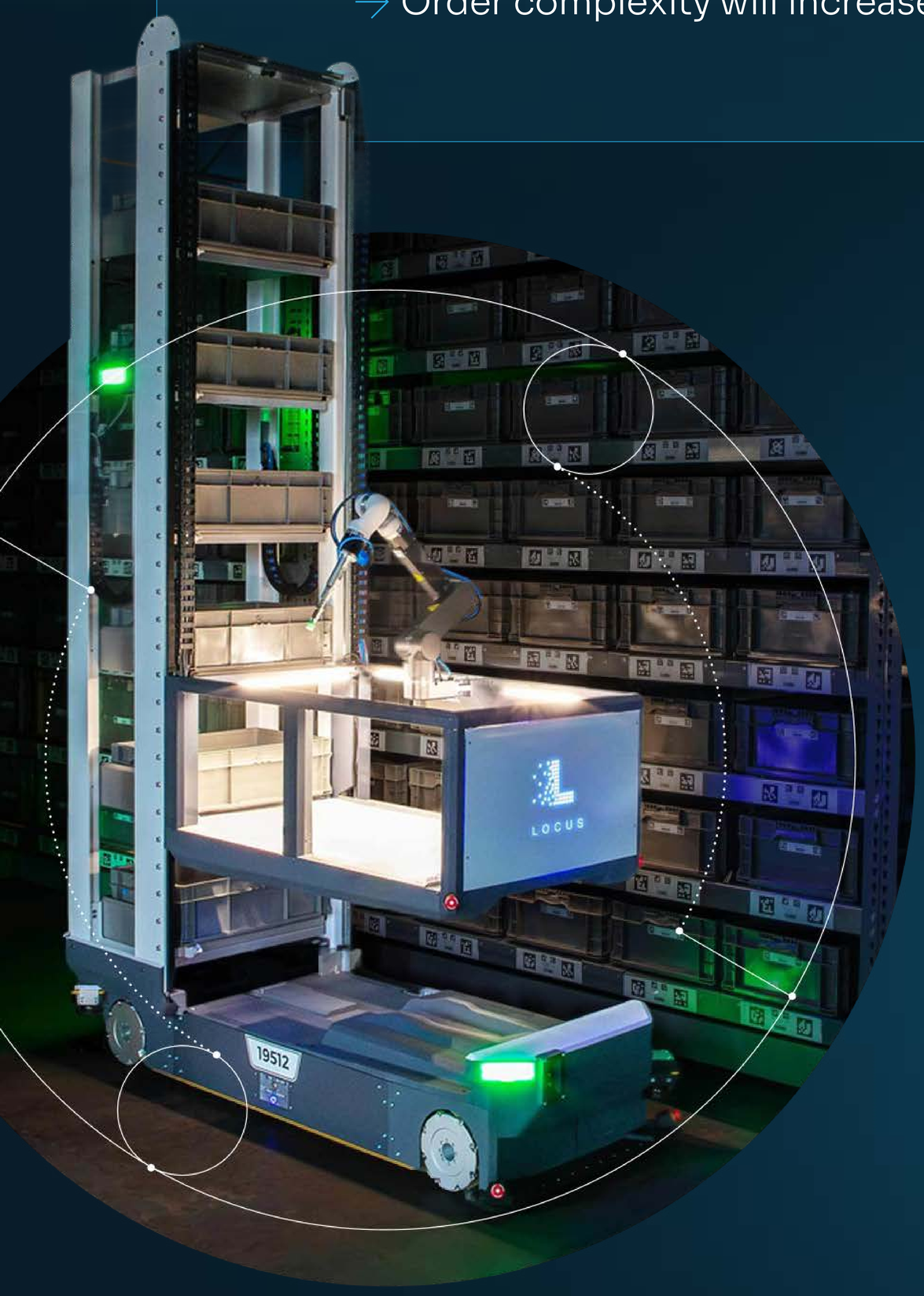
The pressure on warehouse operations isn’t temporary.

- Volume will continue to shift.
- Labor will remain unpredictable.
- Order complexity will increase.

The question isn’t whether things settle down.

Most operations are already seeing that they won’t.

It’s whether your operation can perform without them settling down.



Operations that move early are already seeing:

Faster onboarding for new associates

More consistent pick rates across shifts

Fewer cascading bottlenecks

More stable throughput during peak variability

Operational Confidence gives leaders control:

1. Scale without adding complexity
2. Absorb variability without losing performance
3. Maintain service levels under pressure

This is not a short-term fix.

If your operation depends on stable labor or predictable volume to hit targets, performance will continue to vary.

The gap between plan and execution will keep widening.

And over time, that gap shows up in **missed SLAs, higher labor costs, and inconsistent performance across sites.**

> **It's a decision about how the operation runs going forward.**

Operational Confidence Checklist

- Can you maintain pick rate when volume spikes mid-shift?
- Can you keep work moving when labor drops unexpectedly?
- Can putaway, picking, and inventory flow stay aligned without manual coordination?
- Can you contain bottlenecks before they spread across the operation?
- Can you scale without redesigning your facility?

What It Takes to Keep the Floor Moving

Operations today aren’t struggling because teams lack capability.

They’re struggling because systems were built for a level of predictability that no longer exists.

Locus Robotics helps organizations build Operational Confidence through a coordinated system that keeps picking, putaway, and inventory flow aligned — so one delay doesn’t cascade across the operation. Instead of reacting to disruptions, operations stay ahead of them.

The floor keeps moving without needing perfect conditions to do it.

> **The result is straightforward.**
> **More flow.**
> **Less disruption.**

And an operation that performs the way it needs to every shift.

About Locus Robotics

Locus Robotics is the leader in Flexibility-First Warehouse Automation, delivering Operational Confidence to warehouse operators navigating an environment defined by constant uncertainty. Locus Robotics enables organizations to plan, execute, and adapt across volume volatility, labor variability, and evolving order profiles.

Powered by the LocusONE platform, Locus Robotics orchestrates fulfillment workflows across picking, replenishment, sorting, and pack-out through a unified system of robotics, orchestration, and applied AI. The platform provides predictive visibility, adaptive decision-making, and elastic execution — giving operations leaders clear insight into capacity, throughput, and risk without fixed infrastructure or disruptive facility redesigns.

Trusted by more than 150 retail, healthcare, 3PL, and industrial brands across 350+ sites worldwide, Locus Robotics supports operations at every stage of the automation journey. Delivered through an industry-first Robots-as-a-Service (RaaS) model, Locus Robotics enables performance to evolve as operational needs change.

For more information, visit www.locusrobotics.com or follow us on social media.