

FORTNA

Thought Leadership Series

Smart from the Start:  
**Why Operational Design  
Should Lead Your  
Automation Strategy**



**Smart from the Start:**

# **Why Operational Design Should Lead Your Automation Strategy**

In today's unpredictable business climate, supply chain management faces more disruption than ever. Between labor shortages, escalating costs, space constraints and even rising customer expectations, organizations are under pressure to deliver. Automation seems like an obvious solution.

However, without the right strategy, warehouse automation alone won't solve your biggest challenges. By utilizing a "Smart from the Start" approach by leading with operational warehouse design, organizations can better align automation with their long-term goals, ensuring flexible, scalable and lasting results.

## Why start with operational design?

Many times, businesses rush into automation to solve immediate supply chain challenges without a clear understanding of root causes or even the long-term impact. This can result in systems that are rigid, underutilized or quickly outdated.

Operational design is the strategic process of mapping and optimizing how workflows, materials and information move through your facility before introducing automation. It considers everything from workforce dynamics and facility layout to throughput requirements and growth objectives to ensure the operation is positioned for both immediate and future success.

An operational design-first approach ensures your automation strategy aligns with your business goals, which may include labor cost reduction, efficiency gains and scalable systems, while meeting immediate customer demands.

## Key questions to ask

Before creating an operational design, consider the following:

- What are we solving for? Reduce costs, throughput, capacity, order fulfillment processes, labor?
- How will order volumes and profiles shift in 3–5 years?
- Are there specific business requirements that need to be achieved?
- What are the key performance indicators (KPI) that will be used to gauge success?
- How will automation integrate with our warehouse management system (WMS), warehouse execution system (WES), enterprise resource planning (ERP) and other software platforms?

Looking ahead is important, but it's equally critical to ground your strategy by analyzing and benchmarking historical operational data. Understanding where you are today sets a baseline for where to go in the future. FORTNA supports organizations by evaluating historical performance and uncovering operational insights to build a smarter, more resilient roadmap.

These insights form the foundation for an operational design tailored to your business, enabling smarter investments to deliver long-term outcomes and customer satisfaction.



## Brownfield projects, greenfield thinking



Retrofitting automation into a brownfield facility comes with its share of challenges including warehouse space constraints, aging systems and operational disruptions. Yet with the right approach, these challenges can be turned into opportunities.

Rather than embarking on large-scale capital-investment projects, you can rethink how to get more from what you already have. By applying a greenfield mindset to your brownfield facility, you can reimagine workflows, upgrade select systems, introduce smart software enhancements, and focus on modernization efforts.

Applying greenfield thinking means stepping back to design with a fresh perspective using tools such as simulation modeling, digital twins and analysis tools to uncover new possibilities inside your existing footprint without compromising flexibility for the future.

## Real-world results: design before automation

A leading retailer was struggling to keep pace with rising order volumes. Order fulfillment processes were outdated, labor costs were high and their existing facility offered little room for expansion. Rather than jumping straight to an automated system, they started with a complete operational design.

After an assessment across the facility, the team mapped existing workflows, identified bottlenecks and developed a high-efficiency fulfillment strategy. Shift planning was optimized, and growth modeling helped forecast future needs and inventory levels, ensuring any automation investment would support long-term goals, not just immediate fixes.

With a clear design blueprint in hand, the retailer implemented an AutoStore system with FORTNA, a customized solution to fit their constrained footprint while unlocking new levels of operational efficiency and scalability.

### Results:

- 40% more volume capacity without facility expansion
- 55% labor cost reduction through improved workflows and automation
- 109% boost in productivity

By reimagining their operations before automating, the retailer turned a restricted facility into a high-performing, future-ready distribution center, proving that the right design, not just the right technology, was the key to driving sustainable growth.

## Do you need an operational design?

If your business is experiencing any of the following, an operational design might be your next step.

- Fast growth or demand volatility
- Labor shortages or high turnover rates
- Picking accuracy or missed service agreements
- Capacity restraints and utilization
- Limited flexibility

---

# FORTNA

## FORTNA Can Help

The right operational design unlocks the full potential of automation, positioning your business for lasting success. Whether optimizing an existing facility or planning for future growth, teaming up with leaders who provide a clear roadmap can help you move forward with confidence.

By partnering with FORTNA, you will receive expert support in operational strategy, technology integration and real time data insights to enhance your current operations while planning for tomorrow's growth. Take the first step toward smarter automation.

Contact us today at [www.FORTNA.com](http://www.FORTNA.com)