

FORTNA

Thought Leadership Series

# Six Steps to a Successful Robotics Integration



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Robotics has undoubtedly been a topic in the supply chain and distribution industries for the past several years. Industry events have been populated with robots of all shapes and sizes developed to solve a myriad of challenges on the warehouse floor. While these solutions are creative and have their own merits, the key to a successful robotics program lies not only in the solution but also in its integration with the warehouse system and related labor.

In this FORTNA Insight, we will examine the key steps to preparing and executing a successful robotics integration.

## Set Business Requirements

While diving into a robotics project might be tempting, a deep understanding of an operation's business requirements, obstacles and challenges is necessary. Defining the primary pain point or issue a robotic solution will solve will be vital in determining return on investment (ROI) and overall satisfaction. Understanding the current and future goals and objectives of the organization can determine and number of robots an operation can deploy. Some solutions can seem like a win-win scenario however, if they do not align with business requirements and growth plans, they can quickly become a wasted investment.

Setting and aligning your business requirements with executive leadership before exploring a robotics or automated solution is paramount, as it will guide and help identify the appropriate solution for your operation.



## The Importance of an Operational Assessment

Partner with an organization that offers expertise to conduct an operational assessment of your warehouse equipment, processes and software. This assessment can identify immediate issues that need remediation and identify inefficiencies in inventory control, capacity and order fulfillment. An operational assessment can benchmark operations and help forecast the advantages of one robotic solution over another.

An operational assessment is a fundamental step in building a business case for robotics, as the current state, current challenges and growth potential will be identified, measured and supported with real data.

## Consider an Agnostic Approach

Some organizations will begin their robotic search with the manufacturer, and while they bring industry experience and solutions, an operation will be limited to their offerings and experience. These limitations may result in possible solution design and connectivity issues and overall disappointing results.

Widening your search for various robotic solutions can lead to an interesting, creative and, most importantly, the right solution for your operation. Working with a supply chain partner that understands the design and implementation of diversified robotic options can ensure a best-fit solution in terms of features, scale and budget.

## Operational Design

One of the quickest paths to an unsuccessful robotics integration is shoehorning a solution into a current operation and expecting dramatic results. The addition of robots to an operation will fundamentally change the warehouse floor and order fulfillment flow. An operational design addressing a robotic solution will maximize the investment and ensure an optimized and, more importantly, safe work environment. In addition, an operational design will provide opportunities to reclaim lost capacity and create optimized inventory, picking and shipping practices.



## Phased Implementation

An all-at-once implementation is usually not a preferred strategy for robotics, especially for a brownfield facility. Introducing robotics, such as autonomous mobile robots (AMRs), to a facility without a testing and adjustment period can lead to an unsatisfactory launch for management and staff. A phased approach can gather data from both the warehouse floor and the robot to make critical adjustments before a full-scale implementation occurs.

Pre-integration testing can identify warehouse floor issues like rough travel areas, bumps and holes that can deter or damage robots. It can also reveal wireless dead spaces, travel obstacles and safety issues. Recognizing and managing these issues before a full-scale implementation can accelerate deployment and lead to a smoother launch.

## Introduce and Educate

Educating and training labor may be one of the most essential parts of an integration plan, yet it receives the least attention. Having a transparent plan allows for training and interaction with the staff managing the process and the team that will be working alongside the robots. Implementing an open approach to training allows workers to ask questions, get comfortable, and even get excited about working with new technology that, in most cases, will make their workday easier and physically less straining.

An open approach to training can help relieve the stigma attached to robots in the warehouse as only being implemented to replace workers. In many cases, robots are used to complete physically draining, repetitive movements and will often move workers to more productive activities and create new positions in the company for maintenance and programming.

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# FORTNA

## FORTNA CAN HELP

FORTNA robotic experts will partner with your business to engineer flexible, scalable and modular solutions that meet your unique business needs. Our agnostic approach allows for flexibility in design and technology to ensure best-fit solutions and delivers the speed, accuracy and efficiency to fulfill business and operational requirements.

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