

WORLD CLASS

I N T E G R A T I O N

Q U I C K S T U D Y

CLEAR, COST EFFECTIVE SOLUTIONS FOR
WAREHOUSING AND DISTRIBUTION

Improve operations using **World Class Lean principles**

When looking to improve fulfillment operations at your company, it can sometimes be difficult to determine a starting point. Accurately evaluating the existing process - let alone improving it - could take months. To help you move the process forward, World Class Integration has refined and elevated a unique program - QuickStudy. As its name implies, Quick Study is designed to provide a high-level evaluation of your operations in just a few weeks.

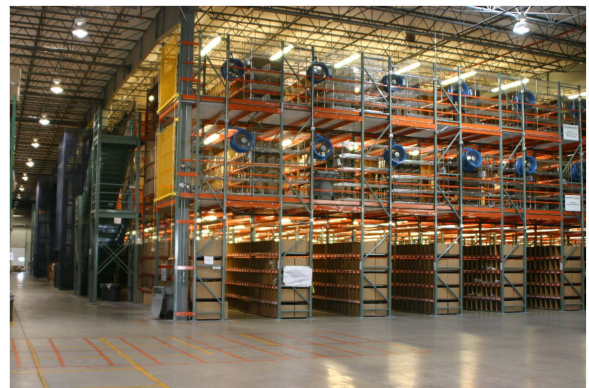
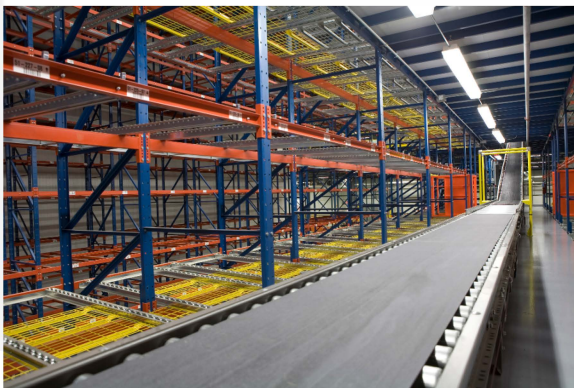
In a Quick Study, our team of experts analyzes your current process, identifies potential problem areas, and explores possible solutions. The process involves a thorough study of the entire operation including observatory interviews and data analysis. From this information, we can develop initial concepts integrating the best technology, equipment, and controls. World Class Integration will provide you with a final report and presentation at the conclusion of the study.

Thorough understanding of current processes & pain points

Analysis of qualitative and quantitative data using **cutting edge statistical tools**

CAD compatible 2D & 3D concept **drawings of solutions**

Portfolio of analysis, solutions, and financial benefit



Signs You Need a Quick Study

Several conditions can determine the need for a Quick Study. The more of these that apply to your operations, the more you stand to benefit

If you have already recognized some of these problems and have begun looking for solutions, a Quick Study can help speed up the process.

FLOOR SPACE CONGESTION	EXCESSIVE CYCLE TIMES AND WIP INVENTORY
NO ROOM TO EXPAND OPERATIONS	INABILITY TO MEET SCHEDULE COMMITMENTS
LABOR-INTENSIVE PROCESSES	SLOW RESPONSE TO CUSTOMERS
DIFFICULTY MANAGING DAILY OPERATIONS	POOR INVENTORY CONTROL
DIFFICULTY OBTAINING ACCURATE & TIMELY INFORMATION	CHANGES TO YOUR OPERATION REQUIREMENTS

Quick Study Benefits

The Quick Study program delivers a number of benefits to help you immediately begin solving material flow problems. A Quick Study:

- Provides operations analysis quickly and cost-effectively which can:
 - Improve the efficiency of fulfillment operations
 - Make more effective use of distribution and manufacturing space
 - Reduce time and resources spent on non-value-added material movement, staging and storage

- Stimulates new and innovative thinking emphasizing world-class standards
- Involves both senior executives and line managers in discussing how real improvements and savings can be achieved through improved logistics flow
- Applies Lean techniques to manufacturing, warehousing, and distribution

- Develops logistics flow solutions that include:
 - Facility and work flow layouts
 - Operational concepts
 - Budgets for selected solutions
 - Justification scenarios
- Presents study analysis and results to the project team and top-level decision makers

Team Approach

Resolving complex problems requires teamwork. You understand your daily operations and unique conditions better than anybody. Our engineers have years of combined experience in logistics for a variety of industries. Together, we can combine our expertise to analyze current processes, explore options, and begin evaluating potential solutions. The result of this team approach is a report

based on inside knowledge of your operations with an independent, outside perspective. Quick Study findings give you an overview you can use for immediate short and long-term logistics planning. Most importantly a Quick Study gives your team, including top-level decision makers, an understanding of the problems and possible solutions-essential to gaining their support for any re-engineering effort.

Testimonials

At Purple, the study has allowed us to double our production over the past 9 months with a smaller staff and a far more organized and safer operation.

Matt Montroy
Director Warehouse Operations
Purple

Mark Westover, of World Class Integration, has been a major part of our success. We were recently recognized as one of the country's fastest growing companies bin the INC 5000. Mark and his team helped us develop the vision for the processes and technology that has resulted in this spectacular growth.

Dave Burns
Founder
Enlinx

We've averaged about 2-3 major projects each year with members of World Class since the mid-1990s. World Class Integration has been professional, knowledgeable and have gone the extra mile in the design and execution of our projects to make sure they are exactly what needed and within budget.

Don Ostler
COO Growth & Acquisitions
CertiFit Auto Body Parts

Typical Operation Problems

Space Problem:

Growth of the existing business and the addition of new manufacturing areas and equipment have used up all available facility space. This can lead to:

- Material is lost or misplaced, leading to productions stoppages
- Increased time and labor to expedite material
- Late and missed shipments
- Dissatisfied customers

Cycle Time Problems:

- Workers pick single orders with low efficiency
- Materials are scattered throughout facility
- Workers have to de-trash material in addition to picking
- Material is stored/picked in the wrong medium

Accuracy/Error Problems:

- Incorrect item or PO number keyed in
- Lost or unreadable data entry sheets
- Paper based system, handwriting errors
- Excessive time required to correct data entry errors

Inventory Problems:

- The facility seems empty, even when it's not
- Increased back orders are all too commonplace
- Parts can't be found when you know they're in stock
- Multiple order handling and increased costs

Ergonomic Problems:

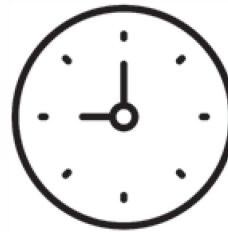
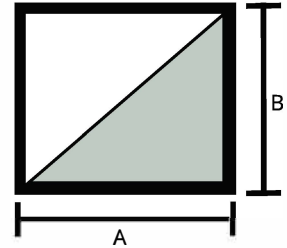
- Workers have to climb, bend, stoop, or stretch to access material
- Workers must handle bulky or heavy loads
- Material is stored in a hostile environment
- Material must move at high speed

Labor Problems:

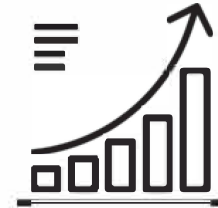
- Work is labor intensive
- Workers are performing non-value added tasks
- Workers feel like there is no where to advance
- Workers cannot control their work flow

Typical Lean Benefits

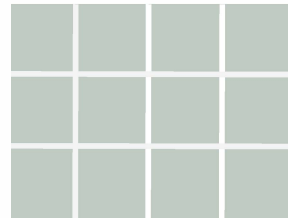
SPACE REDUCTION
30-60% Reduction



CYCLE TIME
40-80% Reduction



ERRORS
Reduce up to 90%



INVENTORY
Reduce up to 80%

ERGONOMICS
Up to 80% improvement



LABOR REDUCTION
30-60% improvement

The Quick Study Process

1. Initial Walk Through

A material flow expert from World Class Integration conducts a two-hour walk through of your facility, noting major areas with potential for improvement. From this initial analysis, World Class Integration provides a Quick Study proposal.

2. Quick Study Launch

After the proposal is approved, World Class Integration schedules a visit to your facility. At the kick-off meeting, both teams:

- Review company objectives and trends
- Discuss trends and technologies in material flow logistics
- Review the study objectives, process, and schedule
- Discuss project responsibilities for World Class and your team members

The rest of the time on site includes three steps:

A. Review Material Flow Pipeline and Processes

A team of World Class Integration experts goes through your production/fulfillment pipeline, from raw material receipt to finished goods shipment. Through observations, interviews with key workers and executives, and your real-world operations data, World Class Integration can determine requirements for:

- Facilities
- Production and distribution processes
- Material flow and storage
- System control
- Growth projections

B. Develop Concepts

World Class Integration and your team review the initial data findings and explore a number of potential design solutions

C. Present Initial Findings

World Class Integration delivers a preliminary report to your team members and senior management. This report defines both problem areas and key opportunities for improvements.

The rest of the time on site includes three steps:

3. Refine Concepts/Prepare Final Report

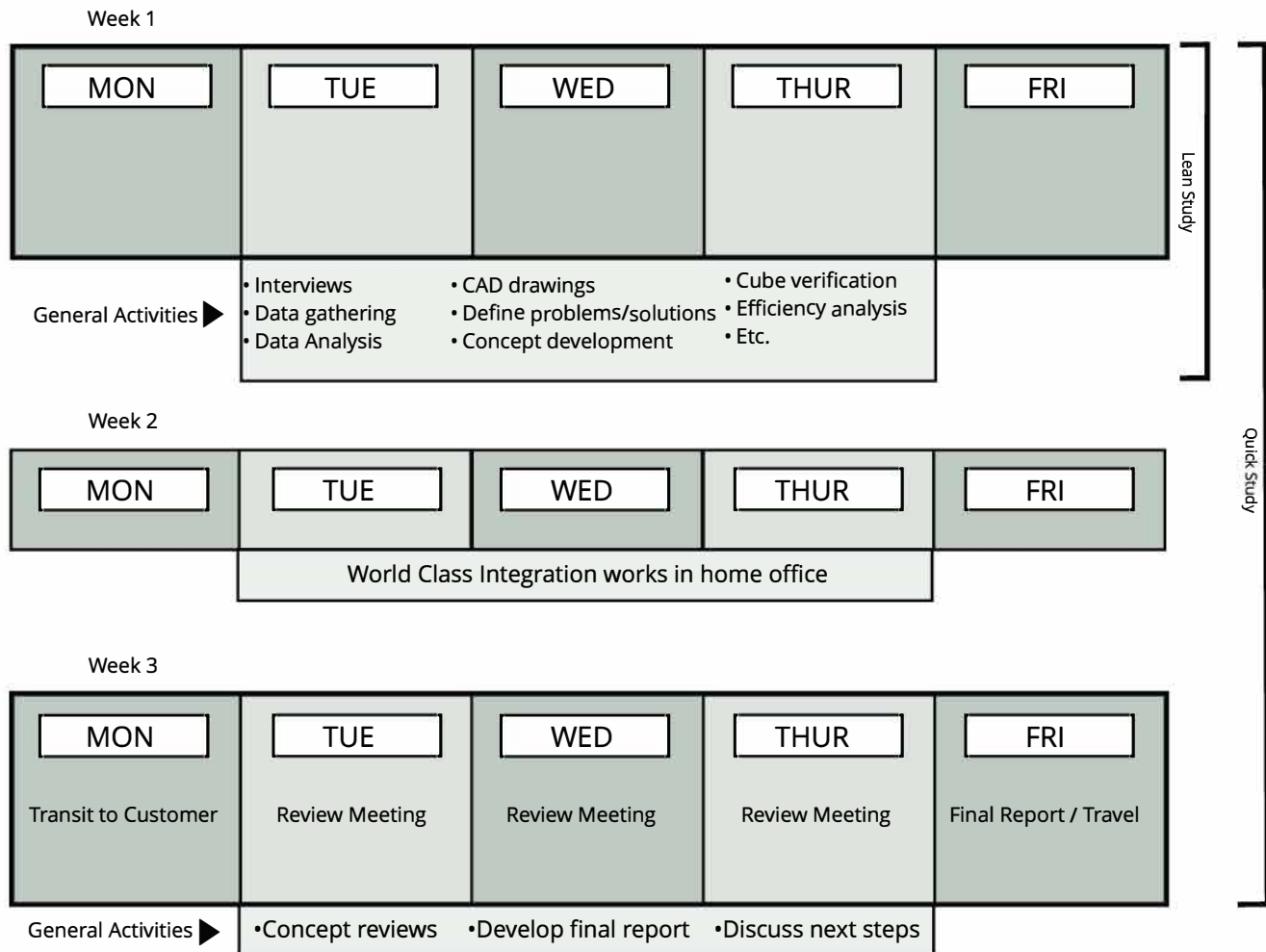
World Class Integration refines the initial design solutions discussed and reviews the data gathered at your facility in greater detail.

4. Present Final Report/Determine

World Class Integration meets with your team members and senior executives to go over the final Quick Study and determine next steps in your re-engineering process.



Typical Quick Study Timeline



The World Class Integration Experience

Our logistics engineers have a combined 90 years experience working in factories and distribution centers of all sizes. This is an important factor when choosing a logistics partner because many manufacturing and distribution challenges have their roots in common causes. Our depth and breadth of experience not only ensures familiarity with your industry, but that we bring the best practices from all industries to bear on your solution.

World Class Integration is a leading provider in material handling and fulfillment equipment and service. Founded in 2017 by industry veterans, Mark Westover and LaMar Leishman, the World Class Integration team has set out to confidently lead companies through their logistics growing pains.



Mark Westover has 29 years of experience designing Warehouse Operating Systems including processes & equipment that enable highly effective materials flow. His special skill is in applying LEAN principles to distribution. Mark has designed process and systems for reverse logistics, receiving, replenishment, picking, packing and shipping functions.



LaMar Leishman has 47 years of experience in the material handling industry as a logistics engineer. As lead engineer and designer, LaMar has created and implemented hundreds of solutions. Throughout his career, he has served in various roles including Director and Vice President roles with Daifuku, Hoj Engineering, Otis Elevator Company, and Seagate Technologies.



Bryson Westover has 5 years of experience in the supply chain and material handling industries including warehouse operations, spatial analytics, logistics network design, inventory management, and mechanical installation.



Michael Schulte has 4 years of experience in supply chain management. He specializes in data driven optimization and advanced fulfillment analytics. Michael has previously worked in various roles in supplier & inventory management across three continents.