

SOLVE FOR X.

10 Steps to Improve Operational Efficiency

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Seminar Overview

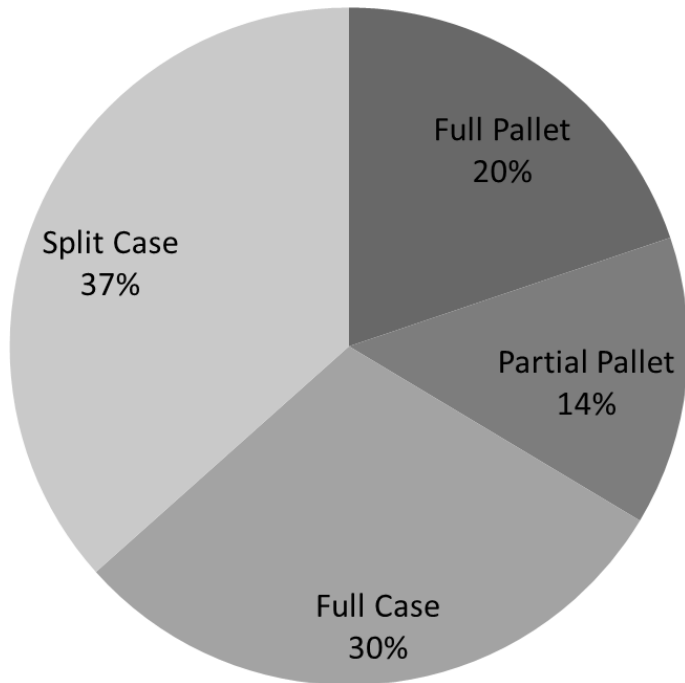
Abstract

Companies spend millions of dollars annually to design, build and operate distribution centers, warehouses and fulfillment operations. Operations are experiencing business changes that impact their customers and financial bottom line. The challenge is to identify and address change indicators before the operation becomes inefficient or completely out of control. This seminar will provide 10 important steps operations can take to identify change indicators and ensure operational efficiency today and in the future.

Key topics

- Common challenges
- 10 steps toward operational efficiency
- Key performance indicators
- Bottom line rewards

The Order Challenge



Performance Metric*	Rank	Target
On-time shipments	1	>99.8%
Internal cycle time	2	<3.8 hours
Dock-to-stock time	3	<2 hours
Total order cycle time	4	<7 hours
Order accuracy	5	>99.8%

Operation metrics focus on managing opposing forces:

Available Inventory vs. Inventory Cost
Speed of Fulfillment vs. Order Accuracy
Cycle Time vs. Fulfillment Costs

*WERC 2015 Benchmark Survey

**PRG Warehouse Operations and Trends, 2014

The Fulfillment Challenge



Did you know that builders say that e-fulfillment centers have 4x the parking spaces as traditional DCs?

What does it all mean?
More orders to fill!
More labor required!

The Labor Challenge

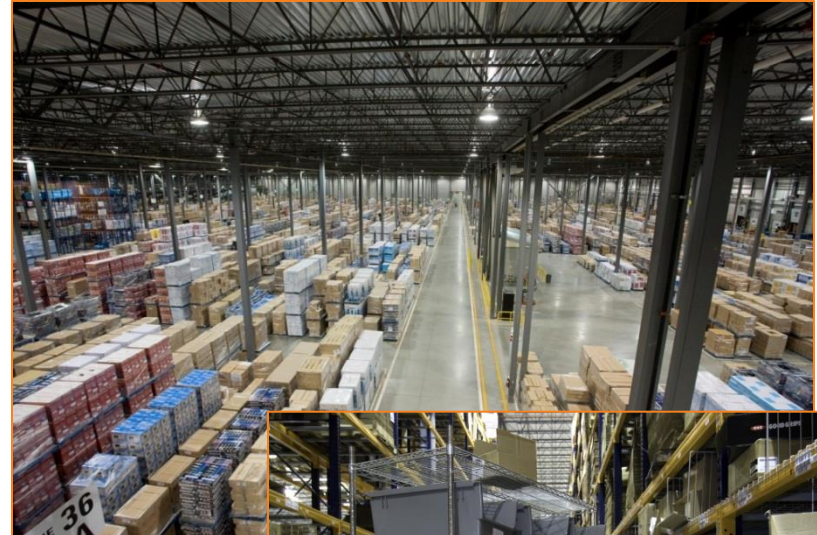
- 84 percent of those trying to hire reported few or no qualified applicants for the positions, market at “full employment.”
- The Boomerang – participating at historic highs, but still retiring, fewer workers and loss of leadership
- Millennial’s labor participation at historic lows, salary expectations gap
- 270,000 new jobs are expected in industry by 2018
- 15 percent of workforce are supervisors and managers, 25 percent are 55+



What does it all mean?
Need to train and retain talent!
Need to coach productivity and efficiency!

Common Operational Challenges

- Lack of qualified labor
- Labor cost
- Accuracy
- Space
- Customer service
- Customer demands
 - Value added services
- Data → information
- Site locations
- Shared inventory process
- Supply chain uncertainty



Evaluating Your Operation

How do you know if your facility is out of control?

- Data analysis and trends
 - Productivity
 - Accuracy
 - Cycle time
 - Costs
- Observation of product flow
 - Bottlenecks causing work stoppage or waiting
- Space
- Customer complaints and returns
- Interviews and feedback
- Behind organizational goals or facility design capabilities

10 Steps to Improve Operational Efficiency

1. Know your operation
2. Train, train and train again
3. The people business
4. Order fulfillment focus
5. Improve customer service
6. Remove barriers to success
7. Raise the bar
8. Process review
9. Benchmark
10. System power

Step 1: Know your operation

- Audit your operation
 - Is the operation performing the way you thought?
- What are your metrics compared to others?
- Where are your opportunities?
- What will your operation need to look like 3, 5, 10 years from now?



**Your MHE
supplier can help**

Key Areas for Improvement Metrics

- Identify potential areas for improvement focus
- Business intelligence tools to measure and provide feedback
 - What is tracked today or should be tracked to improve future performance?
 - How often is this data reviewed with management and associate teams?
 - Are individual or team goals created from these metrics?



How to Identify Opportunities

Measure and Manage

- Units of measure are tracked and recorded:
 - Each, cases, lines, pallets, pounds, hours, dollars
- Accuracy
 - Error rates are below .05 percent
- Productivity
- Cycle times
 - Measured in hours not days
- Costs



Key Performance Indicator (KPI) Measurements

Accurate Measures

- Generate useful data
- Excellent way to reduce costs
- Improve customer service
- Meet or exceed organizational goals
- Improve profitability



Step 2: Train, Train and Train Again

- When was the last time you trained on your current systems?
- Are you using the tools you have at your disposal?
- Do you have standard tools?
- Do you have cheat sheets?
- Are training steps and quick tips posted?
- Does your training deliver the “why” along with the “how”?



Cross Train

- Reduce vulnerability
- Maintenance
- You know which associate can be pulled into each location
- New set of eyes into area



Step 3: The People Business

- Realize that people are your success or failure
- Treat fairly and with respect
- Know their names
- Provide them with information
- 5 key metrics, everyone know
- Get them, keep them, grow them



Management Review

- Middle management power
- Is the story what you think it is?
- Inexperienced managers
 - 360° reviews more than once a year
 - Quarterly reviews
 - One facility trains others

Accountability

- Standards
 - Every associate needs to know what the expectation is and then receive feedback on how they are doing
- Identification
 - Easy to quantify
- Tracking
- No accountability
- S.M.A.R.T.
 - Specific, measurable, attainable, realistic, time measured

What gets measured is what gets done!

Step 4: Order Fulfillment Focus

- What are your numbers?
- How many types of order filling do you have?
- Are you slotted correctly?
- Do the order fillers have the proper tools?
 - Are they maintained?
 - Is there enough?
 - Are they charged?
- Is your material handling system being put through a preventive maintenance program to ensure up time?
- Goal: Keep order fillers order filling

Slotting/Profiling

- Golden zone
- Properly slotted
 - Dynamic slotting
 - Cartons over hanging slot
 - Stocking should occur prior to picking
 - Fast movers—location—more than one slot in separate area?
 - Think about slotting for reserve and prime



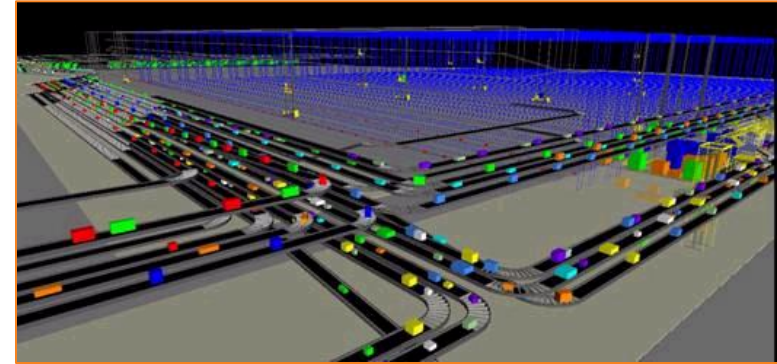
Order Process Mapped

- Track value-added services
- Reduce order cycle times
- Eliminate touches and travel time
- Impact of seasonality on area
- Eliminate unnecessary steps
- Heavy Items



System Design

- Is your facility designed correctly for today's world?
 - Review the design to make sure it is still valid
 - Are you operating the system the way it was designed?
 - Simulate and visit a like facility
 - Review pick mediums
 - Accuracy?!?



Step 5: Improve Customer Service

- Internally
 - Look at small things
 - Generation of paperwork
- Externally
 - Product labeling
 - Track compliance
- Vendor/customer relationship
 - Receiving solutions
 - Chargeback program
 - Communication



Step 6: Remove Barriers to Success

- Identify
 - Track problems and opportunities
 - Check again and again
- Break down barriers
 - Communication
 - 3 ups / 3 downs



Step 7: Raise the Bar

- Inch results up
- Don't settle for mediocrity
- Beware of "always done it" syndrome
- Look for "best practices"
- Create friendly competition
- Reward success – use labor management tools to identify top performers



Step 8: Process Review

- Are your processes documented?
- How often do you update?
- How often do you evaluate the process?
- How often do you analyze it?
- Is there a better process?

Step 9: Benchmark

- Get involved in your industry
 - Industry associations
 - Conferences
 - Vendors KPI
 - Supplier standards
 - Training workshops through your MHE provider
- Know what others are doing in your space
- Knowledge is power
- Knowledge can prevent “quicksand traps”

Step 10: System Power

- Technology review
 - Are there better solutions?
 - Data sheet
 - Schedule maintenance
 - Customer service
 - Database, platform
- MHE systems review
 - Are there better systems?
 - Throughput



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Key Performance Indicators

Key Performance Indicator (KPI) Measurements

Inventory

- Paid inventory ratio
 - On-hand inventory that has been paid against inventory that has not
- Inventory accuracy percentage
 - Actual SKU units / system SKU units
- Inventory days on hand
 - Monthly inventory \$ (avg) / daily sales per month
- Inventory visibility
 - Inventory system receipt time – physical receipt time
- Damaged inventory percentage
 - Total damaged inventory \$ / total inventory value at cost

Order fulfillment

- Order fill rate
 - Orders filled complete / total order shipped
- Order accuracy
 - Orders error free / total orders shipped
- Order cycle times (hrs)
 - Actual ship date – customer order date
- On-time delivery
 - Orders on time / total orders shipped

Key Performance Indicator (KPI) Measurements

Receiving

- Dock to stock hrs
 - $\text{Total dock to stock hrs} / \text{total receipts}$
- \$ Value per unit received
 - $\text{Total received inventory \$} / \text{total units received}$

Productivity

- Units per labor hour
 - $(\text{Orders or units or items or lines}) \text{ Picked or packed} / \text{total DC labor hours}$
- Sales per labor hour
 - $\text{Total sales} / \text{total DC labor hours}$

Key Performance Indicator (KPI) Measurements

Operational

- Cost labor hour
 - $\text{Total variable costs} / \text{total labor hours}$
- Storage utilization percentage
 - $\text{Total cubic feet occupied} / \text{total available capacity cubic feet}$
- Rate
 - $\text{Volume} / \text{hours worked}$
- Utilization percentage
 - $\text{Hours worked} / \text{hours paid}$

Operational (cont'd.)

- Productivity
 - $\text{Rate X utilization}$
- Costs as percentage of sales
 - $\text{Total costs} / \text{total revenue}$
- Cost per unit or case
 - $\text{Total costs} / \text{total units or cases shipped}$
- Controllable cost per unit or case
 - $\text{Total controllable costs} / \text{total units or cases shipped}$

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Bottom Line Rewards

Improved Performance Impacts Working Capital

- Modern distribution center impact on WC
 - Improved cycle times
 - Increased inventory turns
 - Reduced inventory levels and safety stock
 - Insurance
 - Shrinkage
 - Damage
 - Carry costs
 - Improved shareholder value

Improved Performance Impacts Return on Assets

- ROA is a ratio of profits / fixed asset value
- Efficiency improvements + improved space utilization + reduced inventory levels
 - Reduces need for outside storage and costs
 - Reduces capital requirements tied up in future distribution centers and equipment (bottom line ROA)
 - Reduces fixed and variable costs (top line ROA)
 - variable costs

Improved Performance = Bottom Line Rewards

- Company XYZ realizes \$10 profit for \$100 sales = 10% margin
- If
 - Improved performance cost savings = \$250,000
- Then
 - \$250,000 in improved performance cost savings is equivalent to a sales increase of \$2,500,000

Summary

- Review your operation
- Train, train and train again
- People – get them, keep them, grow them
- Order fulfillment focus
- Improve customer service
- Remove barriers to success
- Raise the bar
- Process review and documentation
- Benchmark
- Systems / technology / MHE review

For More Information:

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