Honeywell
Intelligrated

Operational Efficiency

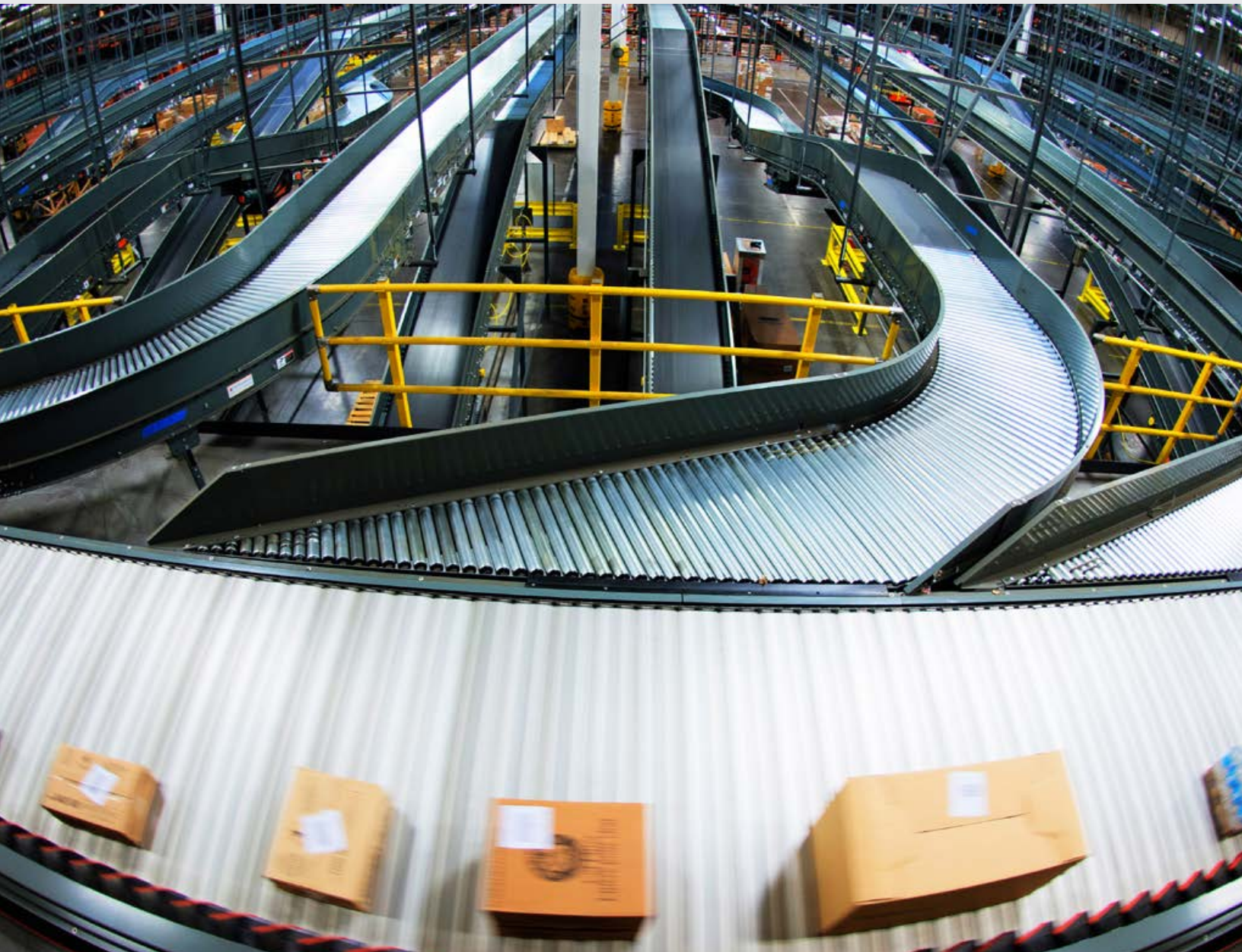


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Operational Efficiency

Companies spend millions of dollars annually to design, build and operate distribution centers, warehouses and fulfillment operations. These operations will experience changes to their businesses that will impact their customers, peers and financial bottom lines. The challenge is identifying these change indicators early and addressing them before the facility is completely out of control. To help identify indicators to change, it is important to first answer the question of "How will you know when your facility is out of control?"

The most common indicators are present in the data analysis and trends being tracked daily, weekly and monthly. Others are identified via product flow observations where bottlenecks are causing work stoppages or waiting, space constraints causing additional product movements and touches, customer complaints and returns. Our front line associates and team members are another excellent way to identify changes early through periodic interviews and daily feedback. Finally, understanding the facility design and capabilities will aid in identifying future problems before they occur.

What Are Some of the Common Operation Challenges That May Be Experienced?

Lack of available, reliable and qualified labor or labor willing to perform the required tasks on a consistent basis and in demanding environments is very common. Many operations are great at training new hire associates but struggle to keep these associates long term. Depending upon the operations' location, an operation may hire and train an entire small town during the course of operation. Labor costs continue to rise and always will over time, yet this challenge is not always embraced by an operation, nor are ways to minimize the impact explored. Poor accuracy and quality may be related to high turnover of labor and inadequate training of the new hire labor. Space constraints within the physical building and specific product movement channel are not uncommon. Our customers continue to request and demand additional value-added services, including packaging, giftwrapping, marketing services, labeling and customized delivery. Site locations and supply chain uncertainty also contribute to the challenges experienced within each of our facilities. Most facilities are data rich and information poor.

So Where Do We Start? First, Know Your Operation!

Perform an operational and mechanical audit to determine if your operation is doing and performing the way you thought. Albert Einstein once stated, "The significant problems we face cannot be solved at the same level of thinking we were at when we created them." Metrics are tools designed to measure and provide feedback for potential areas of improvement focus. Compare operating metrics or key performance indicators, KPI's, to others performing a similar operation or operating in a similar sales channel. Accurate measures generate useful data and are an excellent way to identify areas to reduce costs, provide insights to improve customer service, track performance on meeting or exceeding organizational goals, and improve profitability.

How often is this data reviewed by the management team and shared with our front line associates? How well do your supervisors and line managers know the processes they are managing? Our managers need to be leaders, not just high-level contributors. Do you create individual or facility goals from these KPI's? What is tracked today or should be tracked to improve future performance may be significantly different.

Look into your building's future: what will your operation have to look like, not only next quarter or next year, but several years from now and address today. Review what programs you have in place to improve processes. Do these programs help reduce waste, keep associates working and motivated, avoid multiple unnecessary non value added touches to product, better monitor and control inventory, identify bottlenecks and constraints, and utilize creative ideas? What is your strategy? Addressing the short-term goals and creating a long-term plan that addresses forecasting, training, hiring and retention is critical to creating a flexible and agile operation. Where are your opportunities for improvement – look around, they are always there; addressing them will not only keep your operation moving successfully forward but may provide you with a competitive advantage against your competition.

Second, Train, Train and Train Again.

In many operations, the only training an associate receives is during their new hire orientation. Our associates need to receive updated training periodically, as this is another way to ensure all of the tools that are available to them are being utilized and if not, why not. In addition, best practices should be gathered from our associates and evaluated between each training session. Acceptable best practices should be shared with our associates when performing our updated training, and all future training materials should be updated to reflect these changes. Oftentimes, our associates will encounter an opportunity while on the floor that requires immediate assistance to correct, especially new hires. To help address the most common questions timely, consider posting within each functional area job-specific "quick tips" that include step by step pictures that can be quickly reviewed by the associate. These tips should be designed to help quickly answer the most common questions and aid in allowing the associate to move back on task. During the training sessions, deliver the why to your employees. Once they understand the why, they are empowered.

Cross-train associates within their normal departments and across department lines. Similar to bottlenecks that occur in material flow, not cross-training your associates can expose a bottleneck in resources. This is especially visible when associates call in sick, vacation, or product is flowing through a different delivery channel from where our staff is positioned and trained. Cross-training reduces our operation's vulnerability and allows each team to know which associates can be moved into another location and contribute successfully. We lose what we don't use, so rotate positions occasionally to keep the job task knowledge fresh. Another benefit to rotating cross-trained associates is the new set of eyes that will now be in the area who may ask questions that expose a new way of performing the task.

Third, the People Part of Our Business.

Realize that our people are our success or failure as an operation. Since each individual and work group is unique, learn their motivation keys. A mentor of mine, Jimmy Wright, founding partner of Diversified Retail Solutions, once shared that our focus should be to "get them, keep them, and grow them." Most studies show that employees are looking for interesting work, to be treated fairly and with respect, appreciation for their contribution, and empowerment. Every associate needs to know what is expected of them and receive feedback on their performance. Ensure each of your supervisors and managers knows their associates' names, provides them with feedback and information, and periodically reviews the top 10 key metrics you want every associate to know. Promote those associates who succeed and provide the necessary feedback for those who aren't. For those associates you can't keep, always try to get an exit interview and evaluate the

feedback openly, as it may give you insight into issues you may not be aware of. The winning team always has the most talented, positive and motivated associates.

Fourth, the Order Fulfillment Focus.

Review the system design of your operation to ensure it is still valid, designed correctly for today's environment, and that each area can support the desired sustained rate and required processes. Are you operating the system the way it was designed? If you are unsure, simulate and visit like facilities. Map the order process for conveyable and non-conveyable product. Identify and eliminate duplicate touches, unnecessary steps, minimize travel distance, and focus on reducing the order cycle time to minutes, versus hours or days.

Review each of the storage and pick mediums within your facility against today's volume and the operation's future volume. Is your product slotted correctly and ergonomically positioned? Operations that have break-case selection should periodically review the products slotted in the "golden zone," between the hip and shoulder of the picking associate, to ensure high-velocity product is properly profiled and slower-moving items are not occupying this ideal space. In addition, check that cartons are properly slotted in regard to reserve slot location. Fast-moving items may require additional prime pick locations in multiple areas, mirrored zones, to ensure one area is not holding up the rest of the facility. Verify that stocking of the prime locations is occurring prior to picking to minimize stock outs and rework. Do the picking associates have the necessary tools, and are there enough on-hand tools for each associate? If you are utilizing scanner guns, are there enough batteries and are they charged? Also, ensure that any material handling equipment in the operation is being put through a preventive maintenance program to minimize downtime. The goal is to keep the order fillers on task order filling!

Fifth, Improve Customer Service.

Internal to the facility, look at the small things. Most facilities generate a significant amount of paperwork daily. Some of this paperwork follows the product along through the various internal departments until the product is shipped. Is it all necessary within the operation, and does it add value to the other departments in the facility? Can some of the paperwork be combined, minimized or eliminated? Externally, the focus may need to be on product labeling prior to receiving, tracking inbound compliance issues by vendor and carrier and sharing with each weekly, and communicating with both the upstream and downstream customers regularly. The sharing of inbound compliance data with our upstream suppliers provides them with details that can be acted upon for correction, similar to when our customers call us and provide feedback on our shipments. When the right product shows up at the right time and in the right quantity, your facility should be more efficient.

Sixth, Remove Barriers to Success.

Identify problems and track performance to correct. Break down the barriers to determine the root cause, and diligently push through these barriers. Communication is a common barrier to success. Sometimes barriers to success are self imposed. Empowering employees can remove self-imposed barriers to success. Once a barrier to success is removed, monitor to ensure that it does not reappear or create a new barrier.

Seventh, Raise the Bar!

Inch up the results and don't settle for mediocrity. Many operations fall into the trap that says we have always done thing this way. Begin to create friendly competition between facilities, departments or shifts. Through this process, look for best practices, whether within your organization or externally.

For more information, contact Honeywell Intelligrated® by email at info@intelligrated.com, by phone at 866.936.7300, or visit www.intelligrated.com.

Eighth, Process Review.

Are all of the processes within your facility documented? If they are documented, how often are they updated? While most operations have a process improvement program in place, few review if it is the best program for the operation or if it is adding value. Perform a full review of your processes, and ensure all documentation is current.

Ninth, Benchmark.

Become involved in your industry through the various industry associations, conferences and training seminars. Where possible, utilize your suppliers and MHE providers to help provide realistic rates for equipment and associate interaction. Learn what others in your operation space are doing via these associations. The key here is do you know what your competition is doing.

Tenth, System Power.

Perform a full technology review to ensure the technology today meets the business needs for tomorrow. In addition, verify that the database platforms and applications are meeting the operation's future needs. Require all MHE providers to provide open source code for programs and applications that are developed to run your equipment. This will allow the operation to evaluate the customer support and partnership of the MHE provider and not be tied to always utilizing them if you are displeased with the support.

Are there better systems or tools available? Perhaps a more important question to ask is whether there are better designs that can improve quality or productivity. Technology today is changing so quickly that occasionally systems and tools become outdated shortly after installation. Review all equipment within your operation and validate that scheduled maintenance is occurring. Your suppliers and MHE providers should be able to assist in this final step; simply ask for their assistance.

If you are unsure of where to start, contact your MHE supplier or Honeywell Intelligrated for assistance.

Operational Efficiency KPI's (Key Performance Indicators)

Receiving

- Dock to stock hours
  - Total dock to stock hrs/total receipts

Inventory

- Paid inventory ration
  - 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 $'s (avg)/daily sales per month
- Inventory visibility
  - Inventory system receipt time – physical receipt time
- Damaged inventory percentage
  - Total damaged inventory $'s/total inventory value at cost

Order fulfillment

- Order fill rate
  - Orders filled complete/total orders shipped

Operational

- Cost labor hour
  - Total variable costs/total labor hours
- Storage utilization percentage
  - Total cubic feet occupied/total available capacity cubic feet
- Rate
  - Volume/hours worked
- Utilization percentage
  - Hours worked/hours paid
- Productivity
  - Rate x utilization
- Costs as percentage of sales
  - Total DC costs/total revenue
- Cost per unit or case
  - Total DC costs/total units or cases shipped
- Controllable costs per unit or case
  - Total controllable DC costs/total units or cases shipped

Productivity

- Units per labor hour
  - (Orders or units or items or lines) picked or packed/total DC labor hours
- Sales per labor hour
  - Total sales/total DC labor hours

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