Warehouse Performance Metrics

In today's high-tech environment, warehouse managers have an overwhelming abundance of data to analyze and use to determine how to improve their warehouse operations. Without metrics, there really is no way to know what is and isn't working in a warehouse. The ability to set goals for delivery times, machine utilization, warehouse capacity, customer service and quality of data and analyzing if the goals were met can make a major difference in a company's profitability. To best work through the data, the most important step is to decide which metrics to gather, analyze and report on. Metrics or key performance indicators (KPIs) can be gathered to report on such items as inventory, order fulfillment and operations.

Implementing a third party logistics (3PL) solution can integrate your operations, distribution, fulfillment and trucking services to provide timely, intelligent data. This data can be mined so you can create the KPIs necessary to make the business decisions that will help you to be on the competitive leading edge. Measuring the metrics against your goals will help you to make more intelligent business decisions. When you’re trying to improve operations, consider the following KPIs that you can generate to monitor and measure the performance of your warehouse.

**Top KPIs**

**Supplier On-time Delivery.** This KPI provides important information on deliveries that were on time and how many arrived late. Best in class is ≥ 99.8 percent, median is 98.5 percent.

**Internal Order Cycle Time.** This KPI is measured from the time an order is placed to the moment it gets shipped. It is used to measure the pick-pack-ship efficiency of the warehouse. The objective is to minimize the percentage. Best in class is < 3 hrs, median is 13 hrs.

**Dock-To-Stock Cycle Time.** This cycle time measures the time from the start of a receipt to the time that putaway is complete. This is an important KPI to measure the performance of inbound activities. Best in class is < 2 hrs, median is 6 hrs.

**Order Picking Accuracy.** Order picking is the most costly and labor intensive function in a warehouse. This measurement is critical to monitor for the success of warehouse operations. It is also an important factor when delivering high customer service. It is the percentage of pick lines picked without errors, and the objective is to maximize the percentage. Best in class is ≥ 99.9 percent, median is 99.5 percent.

**Lines Picked and Shipped per Hour.** This KPI is also important to measure to ensure high customer service. It is based on the number of lines picked and packed/total labor warehouse hours. Best in class is ≥ 74.2 percent, median is 28 percent.
**Order Fill Rate.** This KPI percentage is based on the number of items ordered to the items shipped. The fill rate can be calculated on numerous items, such as SKU, case or on a value basis. The best in class for items ordered to shipped is ≥ 99.8 percent, median is 98.3 percent.

**Peak Warehouse Capacity.** This KPI measures the amount of warehouse capacity used during a peak season. It is expressed as a percentage of storage space that have products in them. Best in class is ≥ 100.0 percent, median is 95 percent, but it also depends on how the product is received. The best in class for average warehouse capacity is ≥ 91.2 percent, median is 84.9 percent.

**Annual Work Force Turnover.** This KPI is calculated by taking the total number of employees who resign, plus employees terminated, and divide that total by the number of employees at the beginning of the year. Best in class is < 1 percent, median is 5 percent.

When you embark on an initiative to report on metrics, you will want to compare your KPIs against the best in class so you can identify the underperforming measures. This will ensure that you are in a good position to know where to improve so your company can grow and stay ahead of your competitors.

Resources:
