The metrics, they are a-changin’

You can’t manage—or improve—what you don’t measure. That has long been the premise of our annual warehouse and DC metrics study. The survey, conducted among DC VELOCITY readers and members of the Warehousing Education and Research Council (WERC), asks respondents what metrics they use and how their facilities are performing against those measures, with the aim of helping DC leaders compare their own operations with others in their industry. Here are some highlights of the 17th annual study.

Top 12 most commonly used metrics, 2020

<table>
<thead>
<tr>
<th>Metric</th>
<th>2020 rank</th>
<th>2019 rank</th>
<th>2018 rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average warehouse capacity used</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Shipped complete per customer order</td>
<td>2</td>
<td>32</td>
<td>34</td>
</tr>
<tr>
<td>Order picking accuracy (% by order)</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>% of orders with on-time delivery</td>
<td>4</td>
<td>31</td>
<td>33</td>
</tr>
<tr>
<td>Peak warehouse capacity used</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Shipped outbound orders damage-free</td>
<td>6</td>
<td>33</td>
<td>35</td>
</tr>
<tr>
<td>On-time shipments</td>
<td>7</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Correct documentation</td>
<td>8</td>
<td>34</td>
<td>36</td>
</tr>
<tr>
<td>Inventory-count accuracy (% by location)</td>
<td>9</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Dock-to-stock cycle time, in hours</td>
<td>10</td>
<td>9</td>
<td>16</td>
</tr>
<tr>
<td>Order fill rate</td>
<td>11</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Part-time workforce to total workforce</td>
<td>12</td>
<td>11</td>
<td>7</td>
</tr>
</tbody>
</table>

The 2020 survey revealed a shift in the type of benchmarking metrics most commonly used. In the 2019 report, five of the top 12 metrics focused on employees, while this year’s study found that operations are now prioritizing capacity and quality.

Survey respondents by title

- Manager: 44.8%
- Senior vice president: 19.7%
- Director: 29.0%
- C-level: 3.8%
- Other: 2.7%

Almost half of the survey respondents were senior vice presidents or directors of warehousing, transportation, logistics, or supply chain management.

Survey respondents by industry

- Retail: 16.6%
- Third-party warehouse: 26.5%
- Manufacturer: 18.8%
- Wholesaler/Distributor: 28.7%
- Life sciences – Medical devices: 2.8%
- Life sciences – Pharmaceuticals: 1.6%
- Transportation service provider: 1.1%
- Utilities/Government: 0.6%

Companies in the wholesale and distribution sector made up the largest share of respondents, followed by third-party warehouses and manufacturers. Together, those three industry sectors accounted for nearly three-quarters of the respondents.

What type of DC do you operate?

- Omnichannel: 24.9%
- Regional: 25.4%
- Centralized: 16.7%
- Wholesale: 16.5%
- Local: 5.9%
- E-commerce: 5.7%
- Grocery: 3.4%
- Import: 1.1%

Fully half of the respondents reported that they worked for regional and omnichannel distribution center operations.

Who is your customer?

- Manufacturer: 18.4%
- End-consumer: 25.7%
- Retail firm: 24.6%
- Wholesaler/Distributor: 31.3%

More than 50% of the respondents said their customers were either end-consumers or retailers.

How are orders picked in your DC?

- Full-case picking: 41.4%
- Broken-case picking: 29.0%
- Full-pallet picking: 24.6%
- Partial-pallet picking: 5.0%

Nearly 70% of respondents said orders were picked by the case (either broken or full) in their facilities, while less than a third (29.6%) said they picked orders by the pallet.

Survey respondents by industry

- Almost half of the survey respondents were senior vice presidents or directors of warehousing, transportation, logistics, or supply chain management.
- The 2020 survey revealed a shift in the type of benchmarking metrics most commonly used. In the 2019 report, five of the top 12 metrics focused on employees, while this year’s study found that operations are now prioritizing capacity and quality.

SOURCE: The annual DC metrics study is produced through a partnership between the Warehousing Education and Research Council (WERC) and DC VELOCITY. This year’s survey was conducted by Joe Tilman, a WERC researcher and founder of TSquared Logistics; Dr. Donnie Williams, assistant professor at the University of Arkansas; and Dr. Karl Manrodt, professor at Georgia College & State University. To see the full results of the survey, including performance and benchmarking data, go to www.werc.org.