SUPPLY CHAIN CONFERENCE

Connect. Transform. Deliver.

April 15-17, 2018 | Orlando, FL
Hyatt Regency Grand Cypress

Trading Partner Alliance
FMI and GMA
Back to the Future: Supply Chain Productivity Benchmarking Study

2018
Retail Food Industry is Changing!!

Benchmarking your company for the future
And I’ve…….. Seen the Future!
“If you can’t measure it, you can’t manage it”

Peter Drucker
“Without data you’re just another person with an opinion.”

- W. Edwards Deming, Data Scientist
The Consumer Drives the Food Supply Chain
Customer’s Perspective

- **Anytime:** 24/7/365
- **Any Place:** Format
- **Anywhere:** Geography
- **My Way!**
- **Right Now!**
Over **250** SURVEYS FROM 4 COUNTRIES

30 COMPANIES

71 FACILITIES

38% UNIONIZED

70% EMPLOY CONTRACT LABOR
## Participant Demographics

<table>
<thead>
<tr>
<th></th>
<th>Highest</th>
<th>Lowest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$4 Billion +</td>
<td>$34 Million</td>
</tr>
<tr>
<td>Customers</td>
<td>620</td>
<td>14</td>
</tr>
<tr>
<td>Orders</td>
<td>16,500</td>
<td>76</td>
</tr>
<tr>
<td>Order Size/Customer</td>
<td>2,010</td>
<td>36</td>
</tr>
<tr>
<td># of Associates</td>
<td>1,375</td>
<td>17</td>
</tr>
<tr>
<td>Wages</td>
<td>$45.66/hr</td>
<td>$1.57/hr</td>
</tr>
</tbody>
</table>
DC Operational Characteristics

- **Average Facility**: Clear Stacking Height: 32 feet, 69 Dock Doors
- **Largest Facility**: Clear Stacking Height: 84 feet, 165 Dock Doors
- **Receiving**: 5.4 days/week, 14.8 hours/day
- **Shipping**: 6.1 days/week, 18.6 hours/day
- **Average work week**: 44 hours; 10% overtime
- **Associates per Management**: 14 to 1
### Store Formats Served

<table>
<thead>
<tr>
<th>Small Stores</th>
<th>Supermarkets</th>
<th>Super Stores</th>
<th>Large Volume</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>40%</td>
<td>43%</td>
<td>7%</td>
<td>5%</td>
<td>5%</td>
</tr>
</tbody>
</table>

**Small Stores:** Convenience, Specialty, Neighborhood, Limited Assortment

**Supermarkets:** Conventional Stores: 20-40,000 sq. ft

**Superstores:** Supermarkets: 40-60,000 sq. ft

**Large Volume:** Superwarehouse, Discount/Mass Merchandisers

**Other:** Cash and Carry, Drug, Military
Operating Expenses: Labor

Total Associate Expenses
Percent of sales at inventory costs

- **2018 Benefits**: 0.50
- **2003 Benefits**: 0.60
- **2018 Wages**: 1.42
- **2003 Wages**: 1.19
Historical Trends: Hourly Labor Cost

- 2001: 15.68
- 2002: 15.37
- 2003: 16.31
- 2016: 19.00
- 2017: 21.00
- 2018: 23.44
Operating Cost Per Case

- **All**: $0.53
- **Perishable**: $0.53
- **Grocery**: $0.43
- **Frozen**: $0.33
- **GM/HBC**: $0.11
Operating Cost as a Percent of Sales

- GM/HBC: 2.86%
- Frozen: 2.15%
- Grocery: 2.07%
- All: 1.97%
- Perishable: 1.90%
Key Issues going on the last 3 years surveyed

2016
1- THROUGHPUT
2- TECHNOLOGY ADOPTION (VOICE, RF)
3- MATERIAL HANDLING SYSTEMS

2017
1- PICKING EFFICIENCY
2- AUTOMATION
3- OPTIMIZATION SYSTEMS

2018
1- LABOR RETENTION
2- E-COMMERCE
3- AUTOMATION
### Labor Retention

<table>
<thead>
<tr>
<th>Labor Retention a Major Problem</th>
<th>88%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associates Who Leave Every Year</td>
<td>35%</td>
</tr>
</tbody>
</table>
Move to Online

In as few as five-seven years, 70% of consumers will be purchasing food and beverage goods online. The $100 billion they’re expected to spend annually by 2022 or 2024 is equivalent to every U.S. household spending $850 online for food and beverage annually.

Source: FMI/Nielsen Study
E-Commerce
Percentage of Responses
Instacart = 12%
In House = 88%
48% of the Companies have some sort of E-Commerce
Volume: 1.85%

E-Commerce

Click & Collect Only: 38%
Deliver Orders to Home or Business Only: 23%
Both: 38%
Automated Vs Conventional

Bodies to Bodies Comparison

~ Fully automated facilities are reporting 35% more Cases per Hour throughput than the Best of Breed
Item Proliferation

• Item Count has grown by 10% per annum over the past 3 years surveyed.

• Future count will continue to expand as new products from all over the world are expected by customers.

• Saying NO to additional items has helped specialty food distributors such as UNFI and Kehe.

In 2003: Grocery Item Count was 8,820
AUTOMATION JUSTIFICATION

KEY POINTS TO LOOK INTO

• Inbound decanting
• Selection rates
• Overall throughput
• Peak periods
• Right Item Types
• Maintenance
• Spare Parts

Size Does Matter

TIME

• 8-10 month implementation (from purchase to go-live)

SPACE

• 30% of the space of a conventional flow-rack alternative (25,000 sq ft)

COST

• Same cost as a 3 level Pick-to-Belt Module
Inventory Opportunities

- Over half of the participating companies reported inventory cube exceeding 80% space capacity.

- 55% indicate that they are holding inventory in outside storage.

- As a result, many DC’s are experiencing negative productivity issues and additional costs.
Income Activities: .35% Sales

- Compensatory: 6%
- Other: 10%
- Reclamation: 11%
- Vendor Credits: 25%
- Unloading: 48%

Other: Case Labels, Late Shipments, Cardboard, Plastic, Sold Assets, Drop Shipments
Sustainability Efforts

Percentage of Responses

- Solar Panels: 1%
- Electric Tractors: 2%
- Leed Certification: 7%
- Benchmark: 23%
- Hydrogen Forklifts: 25%
- Ceiling Fans: 59%
- Reduce Mileage: 94%
- Recycling: 98%

0% 20% 40% 60% 80% 100% 120%
Service Level: Order Fill Rate

Percentage of Responses

- 69% for 97-99
- 19% for 95-96
- 6% for 92-94
- 4% for 90-91
- 4% for >90
Insanity: doing the same thing over and over again and expecting different results.

- Albert Einstein
The 2018 Survey Detailed Findings
The Survey

Part B

<table>
<thead>
<tr>
<th>Measurement/Department</th>
<th>Example</th>
<th>Dry</th>
<th>GMHBC</th>
<th>Produce</th>
<th>Cooler</th>
<th>Dairy/Deli</th>
<th>Meat</th>
<th>Frozen Food</th>
<th>Ice Cream</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales from the Distribution Center (Annual Cost)</td>
<td>$ 135,000,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Active Clients</td>
<td>204</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Customer/Store Orders a Week</td>
<td>450</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Active Skills</td>
<td>8,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full Case</td>
<td>7,500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Split Case</td>
<td>2,500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Receiving                              |          |              |              |         |              |              |              |             |           |
| Days Spent Receiving                   | 6        |              |              |         |              |              |              |             |           |
| Hours Spent Receiving per Day          | 8        |              |              |         |              |              |              |             |           |

| Shipping                               |          |              |              |         |              |              |              |             |           |
| Days Spent Shipping                    | 7        |              |              |         |              |              |              |             |           |
| Hours Spent Shipping per Day           | 10       |              |              |         |              |              |              |             |           |

| Number of Employees                    |          |              |              |         |              |              |              |             |           |
| Receiving                              | 3        |              |              |         |              |              |              |             |           |
| Shipping                               | 3        |              |              |         |              |              |              |             |           |
| Hours                                   | 17       | 40           |              |         |              |              |              |             |           |

| Average Number of Hours worked a week per employee? | 40       |              |              |         |              |              |              |             |           |
| Average Number of Hours worked a week including Overtime per employee? | 46       |              |              |         |              |              |              |             |           |
| Number of Overtime Hours worked a week per employee? | 36       |              |              |         |              |              |              |             |           |
| Hours worked with a paid break?         | 30       |              |              |         |              |              |              |             |           |
| Average Wage Rate (include fringe & benefits) | $ 21.43  |              |              |         |              |              |              |             |           |
Historical Productivity

Over Past 3 Years Surveyed

- Average Throughput: 64 (2018), 68 (2017), 59 (2016)
Retailers enjoy the advantage of having more control over their supply chain.

<table>
<thead>
<tr>
<th>Metric</th>
<th>Retailer</th>
<th>Wholesalers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surveys</td>
<td>44%</td>
<td>56%</td>
</tr>
<tr>
<td>Average Weekly Case Movement</td>
<td>834,952</td>
<td>629,584</td>
</tr>
<tr>
<td>Weeks of Supply</td>
<td>3.2</td>
<td>4.0</td>
</tr>
<tr>
<td>Average locations serviced</td>
<td>120</td>
<td>492</td>
</tr>
<tr>
<td>Average Number of Active SKUs</td>
<td>15,178</td>
<td>18,024</td>
</tr>
</tbody>
</table>
Practices – Adoption Levels

Retailer
- Automation: 91%
- No Automation: 9%

Wholesaler
- Automation: 97%
- No Automation: 3%

Retailer
- Voice Picking: 9%
- No Voice Picking: 91%

Wholesaler
- Voice Picking: 15%
- No Voice Picking: 85%

Retailer
- WMS: 100%
- No WMS: 0%

Wholesaler
- WMS: 100%
- No WMS: 0%
Practices – Adoption Levels

- **Retailer**
  - Union: 29%
  - No Union: 71%
  - Picking Incentives: 76%
  - No Picking Incentives: 24%
  - Engineered Standards: 94%
  - No Engineered Standards: 6%

- **Wholesaler**
  - Union: 39%
  - No Union: 61%
  - Picking Incentives: 72%
  - No Picking Incentives: 28%
  - Engineered Standards: 72%
  - No Engineered Standards: 28%
The average wholesaler will carry up to 35% more SKUs than the average retailer.

This difference seems to be more pronounced in Dry Grocery.
Resource Allocation
Paid Hours

55% of the Total Direct Labor Hours are allocated to selection
Selection Method Distribution

- Fully Automated: 88%
- Paper Pick List: 4%
- RF Terminals: 2%
- Voice Directed: [VALUE]

[Diagram showing distribution of selection methods]
Selection Rates Per Paid Hour by Technology

- Fully Automated: 1289
- RF Terminals: 78
- Voice Directed: 149
The average retailer appears to have more control over the orders they ship per week per location. This increases order size and provides more leverage for selection productivity.
Retail vs. Wholesale
Labor and Section Rates Comparison

<table>
<thead>
<tr>
<th>Section</th>
<th>Retailer Average of Sel. Rate</th>
<th>Wholesaler Average of Sel. Rate</th>
<th>Overall Average of Sel. Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry Grocery</td>
<td>83</td>
<td>124</td>
<td>107</td>
</tr>
<tr>
<td>Cooler</td>
<td>90</td>
<td>70</td>
<td>80</td>
</tr>
<tr>
<td>Freezer</td>
<td>91</td>
<td>75</td>
<td>83.5</td>
</tr>
<tr>
<td>OVERALL</td>
<td>86</td>
<td>71</td>
<td>81</td>
</tr>
</tbody>
</table>

- Average of Sel. Rate
- Average of Direct Labour
Engineered Standards (Selection Only)

15% higher in contrast to those without.
Retailers Selection Productivity outperforms Wholesalers

- Dry Grocery = 52%
- Cooler = 21%
- Freezer = 23%

Direct Labor Productivity is slightly higher for Retailers in all areas

- Dry Grocery = 12%
- Cooler = 20%
- Freezer = 30%
Overall Average VS BOB
Labor and Section Rates Comparison

BOB

Dry
- Selection = 225%
Cooler
- Selection = 53%
Freezer
- Selection = 54%

Average

Dry
- Total Throughput = 69%
Cooler
- Total Throughput = 19%
Freezer
- Total Throughput = 59%
Indirect/Total Hours
Percentage of Indirect Hours to Total Hours

Overall: [VALUE]
Freezer: [VALUE]
Cooler: [VALUE]
Grocery: [VALUE]
The average wholesale operation ships to nearly 3 times more locations than the average retail operation.

The average wholesaler receives nearly double the orders of the average retailer.
The Average retail operation departmental relationship
Dry represents almost 50% of total volume

- Dry Grocery: 516,324
- Cooler: 362,586
- Freezer: 143,719

<table>
<thead>
<tr>
<th>Area</th>
<th>Retailer Shipping Volume</th>
<th>Wholesaler Shipping Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry Grocery</td>
<td>516,324</td>
<td>319,462</td>
</tr>
<tr>
<td>Cooler</td>
<td>362,586</td>
<td>235,807</td>
</tr>
<tr>
<td>Freezer</td>
<td>143,719</td>
<td>84,760</td>
</tr>
</tbody>
</table>
Fingerprinting @ Receiving

Percentage of Responses

- 40%+: 47%
- 31-40%: 28%
- 21-30%: 9%
- 11-20%: 11%
- 10%: 5%
- 0%: 0%
- 20%: 0%
- 40%: 0%
- 60%: 0%
Distributor Inventory Turnover

Number of Days of Inventory in the DC

- Produce: 6.5 days
- Meat/Dairy: 13.9 days
- Grocery: 37.3 days
- Frozen: 38.2 days
Retailer Inventory Turnover

Number of Days of Inventory in DC

- **Produce**: 6.2 days
- **Meat/Dairy**: 12.5 days
- **Grocery**: 24.6 days
- **Frozen**: 24.8 days

Almost 2 weeks less inventory on hand than wholesalers.
SKU’s per Department: Retailer

Number of SKU’s

- Produce: 2,040
- Dairy/Deli: 2,471
- Frozen: 2,493
- Perishable: 7,463
- Grocery: 10,430
- GM/HBC: 11,553
SKU's per Department: Distributor

Number of SKU's

- Produce: 914
- Meat: 1,314
- Dairy/Deli: 1,529
- Frozen: 2900
- Perishable: 5,496
- GM/HBC: 10,450
- Grocery: 13,038
Cube Per Item

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry Grocery</td>
<td>0.83</td>
</tr>
<tr>
<td>Produce</td>
<td>0.67</td>
</tr>
<tr>
<td>Dairy/Deli</td>
<td>0.50</td>
</tr>
<tr>
<td>Meat</td>
<td>1.18</td>
</tr>
<tr>
<td>Ice Cream</td>
<td>0.69</td>
</tr>
<tr>
<td>Frozen</td>
<td>0.84</td>
</tr>
</tbody>
</table>

- 0.50  1.00  1.50
Human Resources: Total

- Selection: 34.1%
- Replenishment: 10.1%
- Put-away: 7.5%
- Loading: 6.9%
- Other: 6.6%
- Lumper Hours: 6.3%
- Receiving: 5.7%
- Sanitation/Housekeeping: 5.2%
- Supervisors: 4.2%
- Clerks: 2.8%
- Inventory Checking: 2.3%
- Maintenance: 2.2%
- Inbound Checking: 1.8%
- Managers: 1.8%
- Outbound Checking: 1.3%
- Cross Docking: 1.2%
Human Resources: Total Automation

- Maintenance: 37%
- Lumper Hours: 26%
- Selection: 9%
- Receiving: 7%
- Sanitation/Housekeeping: 7%
- Loading: 5%
- Supervisors: 3%
- Managers: 2%
- Outbound Checking: 2%
- Inventory Checking: 1%
WHY IS BENCHMARKING LOGISTICS IMPORTANT?

BENCHMARKING IS THE BEST WAY TO KNOW HOW YOUR COMPANY’S OPERATIONAL COMPETITIVENESS IS POSITIONED AND HOW TO GET TO THE TOP RANK. (BOB)

- Increase supply chain profitability - reduce operating costs by implementing best of breed practices
- Uncover improvement opportunities – eliminate inefficiencies by scrutinizing your activities
- Justify costly operational improvements
- Quickly identify industry trends
- Enhance internal productivity monitoring – benchmark your productivity level throughout the year
- Drive revenue growth by providing the service that keeps customers satisfied and attracts new ones.
- Identify additional revenue opportunities by differentiating the way you deliver your product or service.
YOU CAN'T DO TODAY'S JOB WITH YESTERDAY'S METHODS AND BE IN BUSINESS TOMORROW.