Welcome to
The Industrial Truck Association
2016 Business Trends Survey

ITA 2016 Annual Meeting
The Fairmont Scottsdale Princess
Scottsdale, Arizona
USA
2016 Business Trends Survey
Task Group

Jesse Cramer, Cascade Corporation
Aurelio Carinci, Hawker Powersource / a division of EnerSys Inc.
Karen Szabo, IMPCO Technologies
Dick Davidson, Thombert Inc.
Jimmy McDonnell, Trelleborg Wheel Systems Americas
James Radous, UniCarriers Americas Corporation

ITA Staff
Brian Feehan
Chuck Harrison
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Panel Members

Jay Gusler (MCFA - Caterpillar)

Tim Quellhorst (Crown Equipment Corporation)

Moderator

Dick Davidson (Thombert, Inc.)
• Survey Sections

• Section 1: Markets and Models

• Section 2: Procurement Practices

• Section 3: Future Technologies and Design Changes

• Each Section is followed by a Qualitative Question specific to that Section
1. Which global market do you see with the greatest potential for lift truck economic growth in the next three years?
Rank each country listed 1-13. One being the greatest growth.

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Mexico</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>China</td>
<td>3</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>USA</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>4</td>
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<tr>
<td>Western European Countries</td>
<td>5</td>
<td>8</td>
<td>8</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Eastern European Countries</td>
<td>6</td>
<td>10</td>
<td>7</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Canada</td>
<td>7</td>
<td>5</td>
<td>1</td>
<td>6</td>
<td>N/A</td>
</tr>
<tr>
<td>Russia</td>
<td>8</td>
<td>13</td>
<td>9</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Rest of Central America</td>
<td>9</td>
<td>9</td>
<td>11</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>Rest of Asia</td>
<td>10</td>
<td>4</td>
<td>10</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Africa</td>
<td>11</td>
<td>11</td>
<td>12</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Rest of South America</td>
<td>12</td>
<td>6</td>
<td>5</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Brazil</td>
<td>13</td>
<td>12</td>
<td>13</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>
2. In the South American market, do you see US exports increasing, decreasing or staying the same in the next three years

![Bar chart for 2016 vs. 2015 trends]

- **Decreasing:** 2016: 53%, 2015: 45%
- **Staying the Same:** 2016: 10%, 2015: 20%
- **Increasing:** 2016: 27%, 2015: 45%
3. On a scale of 1 to 5, with 5 being High Influence and 1 being No Influence, what influences affect US exports to South America?

![Bar chart comparing 2016 vs. 2015 influences on US exports to South America.](chart.png)
1. **Qualitative Question** – What South American countries do you see increasing imports of US goods and what countries do you see decreasing imports of US goods?
1A. **Qualitative Question** – How will the United Kingdom’s exit from the European Union affect/impact market conditions in the UK? In the EU? In the US?
4. Do you see lift truck fleet size being reduced in general?

- No: 53% (2016), 70% (2015)
5. On a scale of 1 to 5, with 5 being High Influence and 1 being No Influence, please rate the influence of the following factors on lift truck fleet size reduction.

- The Increased Availability of Fleet Data Usage
- Truck Productivity
- Truck Durability
- Warehouse Automation
- Reduction in Operating Costs
- Multi Application Truck
- Price

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6. On a scale of 1 to 5, with 5 indicating Very Significant Impact and 1 indicating No Impact, if you foresee the duties imposed on imported US manufactured forklifts being eliminated, what impact would that have on market growth in the next three years?

<table>
<thead>
<tr>
<th>Destination</th>
<th>2016</th>
<th>2015</th>
<th>2014</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Into South America</td>
<td>3.7</td>
<td>4.2</td>
<td>3.2</td>
<td>3.0</td>
</tr>
<tr>
<td>Into China</td>
<td>3.1</td>
<td>3.3</td>
<td>1.4</td>
<td>1.9</td>
</tr>
<tr>
<td>Into Europe</td>
<td>2.9</td>
<td>3.2</td>
<td>2.6</td>
<td>2.6</td>
</tr>
</tbody>
</table>
7a. Where do you currently source the following items?

- **Electrical Systems**
  - In North America: 40%
  - Outside North America: 33%
  - Both: 27%

- **Drive Trains**
  - In North America: 20%
  - Outside North America: 20%
  - Both: 20%

- **Engine/Power Source**
  - In North America: 53%
  - Outside North America: 27%
  - Both: 27%

- **Masts & Attachments**
  - In North America: 53%
  - Outside North America: 27%
  - Both: 26%

- **Hydraulic Components**
  - In North America: 53%
  - Outside North America: 27%
  - Both: 20%

- **Structural Weldments**
  - In North America: 80%
  - Outside North America: 13%
  - Both: 7%

- **Wheels & Tires**
  - In North America: 53%
  - Outside North America: 40%
  - Both: 7%
7(b)(1). Do you anticipate changing the source of the following items in North America, Outside North America or No Change in the next three years?

<table>
<thead>
<tr>
<th>Item</th>
<th>In North America</th>
<th>No Change</th>
<th>Outside North America</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016 Electrical Systems</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>2015 Electrical Systems</td>
<td>0%</td>
<td>95%</td>
<td>5%</td>
</tr>
<tr>
<td>2016 Drive Trains</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>2015 Drive Trains</td>
<td>0%</td>
<td>95%</td>
<td>5%</td>
</tr>
<tr>
<td>2016 Engines/Power Sources</td>
<td>0%</td>
<td>93%</td>
<td>7%</td>
</tr>
<tr>
<td>2015 Engines/Power Sources</td>
<td>0%</td>
<td>95%</td>
<td>5%</td>
</tr>
</tbody>
</table>
7(b)(2). Do you anticipate changing the source of the following items in North America, Outside North America or No Change in the next three years?

<table>
<thead>
<tr>
<th>Item</th>
<th>In North America</th>
<th>No Change</th>
<th>Outside North America</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016 Mast &amp; Attachments</td>
<td>20%</td>
<td>80%</td>
<td>0%</td>
</tr>
<tr>
<td>2015 Mast &amp; Attachments</td>
<td>25%</td>
<td>70%</td>
<td>5%</td>
</tr>
<tr>
<td>2016 Hydraulic Components</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>2015 Hydraulic Components</td>
<td>0%</td>
<td>89%</td>
<td>11%</td>
</tr>
</tbody>
</table>

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7(b)(3). Do you anticipate changing the source of the following items in North America, Outside North America or No Change in the next three years?

- **In North America**
  - 2016 Structural Weldments: 7%
  - 2015 Structural Weldments: 5%
  - 2016 Wheels & Tires: 0%
  - 2015 Wheels & Tires: 0%

- **No Change**
  - 2016 Structural Weldments: 93%
  - 2015 Structural Weldments: 90%
  - 2016 Wheels & Tires: 100%
  - 2015 Wheels & Tires: 95%

- **Outside North America**
2. **Qualitative Question** – Does the value or devaluation of your currency influence what regional area you source items and components? Is this an area of exploration to vertically integrate and build in-house?
8. Rate the following on a scale of 1 to 5, with 5 being Will Utilize and 1 being Will Not Utilize, of all North American forklift shipments that will utilize or feature Fleet Data Information for the following?

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>For the Truck</td>
<td>3.5</td>
<td>3.9</td>
<td>2.9</td>
</tr>
<tr>
<td>For the Fleet</td>
<td>3.5</td>
<td>3.5</td>
<td>2.8</td>
</tr>
<tr>
<td>For the Operator</td>
<td>3.5</td>
<td>3.3</td>
<td>2.3</td>
</tr>
</tbody>
</table>
9. What sources of motive power will show the most growth in electric forklift trucks in the next three years? Please rate the following on a scale of 1 to 3 (where 1 = -10% to 0%, 2 = >0% to 10%, 3 = 11% to 20%)

<table>
<thead>
<tr>
<th>Motive Power Source</th>
<th>1 -10% to 0%</th>
<th>2 &gt;0% to 10%</th>
<th>3 11% to 20%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithium Ion</td>
<td>1</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Lead Acid Battery</td>
<td>5</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Fuel Cells</td>
<td>7</td>
<td>8</td>
<td>0</td>
</tr>
</tbody>
</table>

# of respondents
10. What will be the North American market demand for the following types of Internal Combustion powered forklifts in the next three years? Please rate the following on a scale of 1 to 5 (where 1=Up 5%, 2=Up 3%, 3=Same, 4=Down 3%, 5=Down 5%)

<table>
<thead>
<tr>
<th>Internal Combustion Source</th>
<th>1 Up 5%</th>
<th>2 Up 3%</th>
<th>3 Same</th>
<th>4 Down 3%</th>
<th>5 Down 5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diesel</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Gasoline</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Compressed Natural Gas</td>
<td>1</td>
<td>1</td>
<td>12</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>LPG</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Hybrid</td>
<td>0</td>
<td>2</td>
<td>12</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

# of respondents
11. Which form of social media do you use as a communication and marketing tool to reach out to your customers? Please rank 1 to 6, with 6 being the highest.

- Instagram: 4.0 (2016), 4.0 (2015), 3.6 (2014)
3. **Qualitative Question** – With the introduction of new technology into the forklift market, do you foresee the need for new (or changes to existing) regulations that govern the industry today?
3A. **Qualitative Question** – How do you foresee the presidential election impacting US markets with a Trump victory? With a Clinton victory?
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Questions?

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Thank You For Your Attention And Participation.

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