2019 NATIONAL MANUFACTURING OUTLOOK AND INSIGHTS

INNOVATION.
TECHNOLOGY.
TALENT.
Thank you for reviewing our 2019 National Manufacturing Outlook and Insights report — if you participated in this survey, thank you for sharing your expertise.

In our third year of reporting, we believe the increase in participation is evidence of the value this report, Leading Edge Alliance (LEA) firms provide for our middle-market manufacturing clients across the country and around the world.

For 2019, manufacturers expressed significant optimism for overcoming hurdles.

Looking ahead, manufacturers expect raw materials, labor costs, lack of available talent, and competition to be significant hurdles in 2019. The tariffs implemented by President Trump provide productivity issues; however, an increase in spending on big data and business intelligence deliver innovative technology for minimizing productivity concerns. We believe the resilience and success our manufacturing clients have created for themselves will help alleviate the major concerns for 2019.

Priorities for 2019 focus on growing sales, improving profitability, and addressing workforce shortage. The challenge of gaining a competitive advantage remains critically important. We hope these findings provide you with insightful questions to ask and strategic ideas to evaluate these topics, ultimately helping you grow your business and achieve your goals.

Please reach out to us to discuss any of the information presented in the following report.

Sincerely,

LEA Global Chair, Michael Newton, FCPA Auditor, FCA & Managing Partner FL Fuller Landau
LEA Global COO, Michele Alcorn

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LEA Manufacturing Outlook Survey Results Summary

Optimism for 2019

- Regional: 70%
- National: 68%
- Global: 55%

48% expect international sales will INCREASE in 2019 for their company.

Top 3 Priorities for 2019

1. Growing Sales
2. Improving Profitability
3. Addressing Workforce Shortage
81% expect revenue will grow in 2019 (Q12)

Top Priorities for Growing Sales

A. 50% see ORGANIC GROWTH IN DOMESTIC MARKETS as main opportunity
   - 21% expect to acquire another business in 2019, a 2% increase from 2018
   - 16% of businesses are in the pre-planning stage of a merger/acquisition

B. 22% see a NEW PRODUCT/SERVICE as the main opportunity to grow sales in 2019
   - 51% expect to invest at least 1-5% of sales in Research & Development in 2019

C. 13% will seek JOINT VENTURES/STRATEGIC ALLIANCES to grow sales in 2019

Barriers

The greatest expected barriers for growth in 2019

- Labor/Talent: 52%
- Competition: 34%
- Profitability: 25%
Manufacturers’ Top Priorities 2019

Improving Profitability

54% name improving profitability as a top priority for 2019

Top Priorities for Improving Profitability

31% plan to increase spending on MARKETING and ADVERTISING initiatives

31% will increase spending on TECHNOLOGY in 2019

Top Drivers Impacting Technology Strategy

- 62% - Increasing productivity, efficiency in manufacturing process
- 41% - Utilizing technology to reduce operating costs
- 38% - Improving product quality, consistency, and offering

Most Prioritizing Technology Developments for 2019

- 75% - will be investigating or prioritizing cybersecurity
- 45% - will be investigating or prioritizing ERP consolidation
- 33% - will be prioritizing predictive business analytics/ big data/ and the Internet of Things
Manufacturers’ Top Priorities 2019

Addressing Workforce Shortage

43% name addressing workforce shortage as a top priority for 2019

Top Priorities for Addressing Workforce Shortage

A INCREASE HIRING

• In 2019, 62% expect hiring will increase for their company
• Only 4% of respondents expect a decrease in hiring

B ½ of respondents marked INCREASE WAGES and TRAINING as the highest priority for addressing workforce shortage

• 59% - will increase spending for employee wages
• 38% of manufacturers will focus on apprenticeship training and strategies to reduce turnover.
Economic Outlook
Manufacturers are more optimistic about the regional economy in 2019 than they were in 2018.

While manufacturers rated their optimism for the national economy highest last year, their economic outlook shifted to regional optimism. Manufacturers increased their regional optimism from 69.3 in 2018 to 70.75 in 2019 – a 12.5-point increase from 2017.

Please rate your optimism about the economies listed below in 2019 on a scale of 0 to 100.
Industry Outlook
More than 60% of manufacturers expect their sector to expand in 2019.

Only 30% of manufacturers expected their sector to grow in 2017. Two years later, that percent has more than doubled to 61%. Only 7% expect their sector will contract, possibly due to the 21% of manufacturers planning to acquire another business. Industry optimism is even higher for energy, textiles, machine/industrial, and automotive.

How do you anticipate your manufacturing sector will change?

- 61% Expand
- 7% Contract
- 32% Stay the same

Sector Segmentation

- Energy 88%
- Textiles 67%
- Machine/Industrial 65%
- Automotive 63%
Manufacturer Outlook
Many manufacturers anticipate significant revenue growth in 2019.

13% of manufacturers anticipate a 20% growth in revenue for 2019 – a 2% increase from 2018. Similar to manufacturers in 2018, only 5% of manufacturers expect their revenue will decrease. A remarkable 81% replied with anticipation for an increase in revenue.

How do you anticipate your revenue will change?
of manufacturers with 2-4 locations anticipate their revenue to increase 10-20% in 2019.

The significant anticipation in revenue growth for mid-sized manufacturers refers to manufacturers being regionally optimistic.

of machining and industrial manufacturers anticipate their 2019 revenue to increase between 10-20%.
Opportunities

Organic growth in the U.S., new product development, and strategic alliances provide greatest opportunities for businesses in 2019.

The top opportunity for 44% of manufacturers in 2019 is organic growth in the U.S. – a 5% increase from 2018. This is especially prevalent among 39% of machine and industrial manufacturers. Followed by 12% of those involved in the construction materials sector. Interestingly, 16% of manufacturers in the food and beverage industry see a new product or service development to be a main opportunity for 2019. Similar to 2018, around 13% expect growth to come from joint ventures/strategic partnerships.

What do you see as the main opportunity to grow sales in 2019?

- Machine/Industrial: 42%
- Food and Beverage: 16%
- Textiles: 11%
Greatest Barriers for Growth

Labor costs, great talent and competition remain the greatest barriers for growth in 2019.

Labor costs remain a tough pill to swallow as they continue to rise across the U.S. 52% of manufacturers recognize the concern. Over ¾ of manufacturers expect an increase in labor costs for 2019, an increase of 3% from 2018.

Taxes encompass a significant reduction in the minds of manufacturers with 76% anticipating tax costs to remain the same or decrease.

How do you expect the following costs to change?

34% of manufacturers expect competition as a top risk to growth.
Manufacturer Growth Strategy: Technology
Manufacturers plan to leverage technology as key to solving productivity concerns.

- 99% anticipate technology costs will increase or remain the same in 2019
  - 62% of manufacturers will increase spending on technology to generate organic growth in the U.S.
- 54% of manufacturers will increase spending on technology or intelligence in 2019
- 62% of manufacturers believe increasing productivity/efficiency is the biggest impact of technology strategy
- Cybersecurity is a priority for 34% of manufacturers who are focusing on technology development
  - Cybersecurity, managing ERP consolidation, and predictive business analytics/big data are the top 3 priorities for manufacturers

62% of manufacturers will increase spending on technology to generate organic growth in the U.S.

Technology Developments

<table>
<thead>
<tr>
<th>Technology Development</th>
<th>Investigating</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-D Printing</td>
<td>23%</td>
<td>7%</td>
</tr>
<tr>
<td>Wearable Technologies</td>
<td>9%</td>
<td>2%</td>
</tr>
<tr>
<td>Robotics/A.I.</td>
<td>24%</td>
<td>10%</td>
</tr>
<tr>
<td>Predictive Business Analytics/Big Data</td>
<td>30%</td>
<td>12%</td>
</tr>
<tr>
<td>Nanotechnology/Advanced Materials</td>
<td>15%</td>
<td>2%</td>
</tr>
<tr>
<td>Managing ERP Industry Consolidation (Application Vendors being Acquired)</td>
<td>25%</td>
<td>20%</td>
</tr>
<tr>
<td>Internet of Things</td>
<td>35%</td>
<td>11%</td>
</tr>
<tr>
<td>Cybersecurity</td>
<td>42%</td>
<td>34%</td>
</tr>
<tr>
<td>Blockchain</td>
<td>11%</td>
<td>1%</td>
</tr>
</tbody>
</table>
Manufacturer Growth Strategy: M&A

More manufacturers are considering a merger/sale or acquisition in 2019.

Strategic acquisition remains a growing strategy for manufacturers year-over-year. Since 2017, we have seen a steady increase of 2% of manufacturers considering acquisition and a large jump for merger/sales from 2018 to 2019. Food/Beverage and Construction Material sectors indicate a significantly higher interest in acquisition activities. The largest segment of manufacturers seeking an acquisition generated an annual revenue between $10M-50M followed closely by others with more than $250M.

Did your company consider exploring or are you planning to explore any of the following?

<table>
<thead>
<tr>
<th>Year</th>
<th>Merger/Sale</th>
<th>Acquisition</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>10%</td>
<td>17%</td>
</tr>
<tr>
<td>2017</td>
<td>9%</td>
<td>17%</td>
</tr>
<tr>
<td>2018</td>
<td>12%</td>
<td>19%</td>
</tr>
<tr>
<td>2019</td>
<td>15%</td>
<td>21%</td>
</tr>
</tbody>
</table>

Specific industries considering merger/sale or acquisition

<table>
<thead>
<tr>
<th>Industry</th>
<th>Merger/Sale</th>
<th>Acquisition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food and Beverage</td>
<td>19%</td>
<td>31%</td>
</tr>
<tr>
<td>Machine/Industrial</td>
<td>25%</td>
<td>19%</td>
</tr>
<tr>
<td>Construction Materials</td>
<td>10%</td>
<td>25%</td>
</tr>
<tr>
<td>Other</td>
<td>15%</td>
<td>27%</td>
</tr>
</tbody>
</table>

24% of manufacturers considering an acquisition expect their revenue to increase 10-20% in 2019.
Manufacturer Growth Strategy: Talent

Addressing workforce shortage is a high priority for manufacturers in 2019.

Over ½ of manufacturers emphasized personnel expenses (compensation, training) as the area operational spending will increase. This is due to 62% expecting hiring will increase for their organization. Other critical strategies to address staffing needs include: strategies to reduce turnover, internal training, succession planning, and increased use of overtime.

How do you expect hiring will change for your company?

<table>
<thead>
<tr>
<th>Expected Change</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase</td>
<td>62%</td>
</tr>
<tr>
<td>Decrease</td>
<td>4%</td>
</tr>
<tr>
<td>Stay the same</td>
<td>34%</td>
</tr>
</tbody>
</table>

What staffing strategies has your company found useful? Are they effective long-term strategies?

- Increased use of over-time: 25%
- Increased compensation (salary, wages, bonuses, etc.): 62%
- External training agreements with industry groups, peers, and community/educational institutions: 11%
- Internal training programs (internship and apprenticeship programs): 35%
- Strategies to reduce turnover: 39%
- More deliberate succession planning: 25%
Looking Ahead

Across the board, manufacturers are optimistic about the regional economy, sector growth, and increasing revenue expectations in 2019. In all aspects of business — technology will lead the charge. Spending will increase on big data, and business intelligence, while cybersecurity will be top priority for the rise of the Chief Security Officer. As hurdles abound, so do strategies for increasing productivity and improving efficiency.

Hurdles for 2019

1. Raw Materials
   Raw material costs saw a significant increase from the tariffs implemented by President Trump. The hurdle manufacturers must address is how to increase profitability to make up for the added materials cost.

2. Labor Costs
   Inflationary factors are leading to the rise of labor costs across the U.S. This is a big hurdle for manufacturers to overcome. In order to reach full potential, manufacturers need to improve financial performance to help offset the expense — positively impacting the bottom line.

3. Lack of Available Talent
   Hiring is on the rise — leading to the increase in labor costs. However, the lack of available talent is placing an emphasis on retaining current talent. A win-win for organization and employee.

4. Competition
   The steady growth for U.S. manufacturers is leading to greater competition among firms. This is seen as the second greatest risk to growth in 2019. However, competition breeds innovation — a driver to success in today’s economy.

Through all these potential hurdles, and more, having a team of industry-experienced advisors providing insight and answers to critically important problems. We believe the firms of the Leading Edge Alliance are among the best.

While no one can predict with certainty what will happen in the future, we hope our annual National Manufacturing Outlook and Insights survey report offers you a leading look ahead.
About Survey

More than 350 manufacturing executives participated in the 2019 National Manufacturing Outlook and Insights survey during October 2018. Responses were collected via an anonymous electronic survey link sent to manufacturers from Leading Edge Alliance (LEA) member accounting firms and through local businesses and industry organizations. The survey was conducted using the Qualtrics online surveying software, which is utilized by more than 8,500 leading businesses around the world. All percentages included in this report were calculated based on total responses to each question and might not equal 100% due to rounding. Most question results are based on more than 300 data points.

About the Respondents – Location

Of the 357 participants, approximately 245 manufacturers provided their company headquarters location. The data is representative of manufacturers hailing from 24 states with large segments from the Southeastern and Midwest U.S. Countries included Belgium, Canada, France, and Germany.
About the Respondents – Annual Revenue

Of the 357 participants, more than 250 manufacturers provided their annual revenue. The group ranged from less than $1M to over $250M. The median from this list of respondents was in the $10-$50 million range.

Respondents – Annual Revenue

- 13.73% More than $250,000,000
- 9.41% $100,000,001-$250,000,000
- 9.02% $50,000,001-$100,000,000
- 35.69% $10,000,001-$50,000,000
- 28.24% $1,000,001-$10,000,000
- 3.92% Less than $1,000,000

About the Respondents – Employees

Of the 357 participants, more than 250 manufacturers provided the number of employees in their organization. 75% of the respondents had between 1-499 employees. The median from this list of respondents would be in the 50-99 employee range.

Respondents – Employees

- 34.10% 1-49
- 18.01% 50-99
- 22.99% 100-249
- 6.13% 250-499
- 5.75% 500-999
- 5.75% 1,000-2,499
- 7.28% More than 2,500
About the Respondents – Manufacturing Sector

Of the 357 participants, more than 250 indicated the manufacturing sector in which their business operates. The “Other” category included manufacturers in printing, packaging, high tech/electronics, sporting goods, and more. For purposes of segmentation, respondents in any category with 5% or less were included in “All Other.”

About the Respondents – Geographic Reach

Of the 357 participants, 65% indicated that their employees and operations were regional with the remaining 35% being evenly split between national and international. Competitors, customers, suppliers and vendors were similarly broken down, with around 15% being regional, around 35% being national, and nearly 50% being international. Most the respondents had 1-4 locations, while 23% emphasized having more than 5 locations.
About LEA

Founded in 1999, LEA Global/The Leading Edge Alliance is the second largest international association in the world, creating a high-quality alliance of 220 independently owned accounting and consulting firms focused on accounting, financial, and business advisory services. LEA Global firms operate from 620 offices in 110 countries, giving clients of LEA Global firms access to the knowledge, skills, and experience of 2,313 partners and 21,355 staff members.

LEA Global firms’ combined annual revenue totals more than $3 billion. Members stand out as leaders in their markets with firms ranking in the top tiers throughout all the regions of the world. In the U.S., more LEA Global firms are in the top 100 than any other association or network.

www.LEAglobal.com
Acknowledgments

LEA would like to thank the following organizations for their contribution in producing this survey:

Associated Industries of Missouri
BioHouston
Center of Innovation for Manufacturing Georgia Department of Economic Development
Economic Alliance Houston Port Region
Georgia Association of Manufacturers
Greater Houston Manufacturers Association
HireLevel
Manufacturing CPAs Alliance, a subsidiary of The Rainmaker Companies
Tennessee Manufacturers Association
VA Manufacturers Association