SARASOTA-MANATEE MANUFACTURING SURVEY RESULTS

August 2012
BACKGROUND
Two Phase Study Methodology

Phase One (March 2012): Depth Interviews with CEOs/HR leaders/community partners

Phase Two (Now): Online/Telephone Survey with CEOs/HR leaders
Specific Objectives

Phase One
- To understand, directionally, a possible perceived manufacturing skills gap:
  - Do manufacturers and community partners think it exists?
  - What does it consist of?
  - Why does it exist?
  - What can we do to improve it?

Phase Two
- To quantify the manufacturing skills gap in Sarasota and Manatee counties:
  - How many jobs?
  - What kinds of jobs?
  - What are the current satisfaction levels with community support?
  - How can the community better serve workforce needs together?
Two Phase Study Methodology

Phase One: Depth Interviews with CEOs/HR leaders/community partners
National Reasons For The Gap

• Customized training in house is needed and education model as it exists does not support this
  ❖ Manufacturers cannot afford to take people off the floor
  ❖ Government focuses on broad brush working for everyone and it doesn’t

• Education not keeping pace with rapid changes happening in manufacturing educating to old model, not new; need manufacturers to educate the educators
• Parents don’t understand the manufacturing worker of today
• Private enterprise model conflicts with government and educational model, “no meeting of the minds”
Local Reasons For The Gap

• Because we have highly specialized manufacturers, i.e. no auto industry or medical device industry focus for example, there are issues with providing centralized training programs

• Hard to build a labor pool that can work across many manufacturers without a manufacturing critical mass or focus for region

• Difficult dynamics; community partners not working cooperatively

• Students not being looked at as part of the workforce plan

• Technical Careers not viewed as a career pathway or high wages
Bi-County Manufacturing Trends

• Automation/robotics in manufacturing appears to be a common key trend that our schools should be preparing for

• Skilled production is another, although this is more difficult with the specialized kinds of diverse manufacturing being done in the region

• Another trend is supervision of production
  ❖ Need training to lead and train front line workers

• Rapidly changing from manufacturing companies to tech companies
  ❖ Fewer, higher skilled jobs; manufacturing worker of past does not cut it
  ❖ Educators not keeping pace, limiting them in an already limited environment with a thin pool
Two Phase Study Methodology

Phase Two: Online/Telephone Survey with CEOs/HR leaders
Methodology

• Combined online (N = 95) and telephone survey (N = 30)

• Study fielded 5/23/12 – 7/27/12

• N = 125

• Worst case 90% confidence interval margin of error of 7%

  • Note: Because results are rounded to the nearest whole number - for ease of interpretation - percentages in charts may not equal 100%.
  • Some partial responses were included.
WORKER SHORTAGES
Worker Shortages Today

Where are you experiencing worker shortages today? Check all that apply.

(Total Responses = 168)
Approximately how many jobs are open in your company right now? (Total Responses = 105)
Jobs Unfilled

Approximately how many jobs have recently gone unfilled for 3 months or more? (Total Responses = 105)

- 1-3: 3%
- 4-10: 1%
- 11 or more: 11%
- None: 40%
- Don't know: 45%
What types of jobs have recently gone unfilled for 3 months or more? Check all that apply. (Total Responses = 100)
What types of jobs have recently gone unfilled for 3 months or more? Check all that apply. (Other = 5)
HIRING NEEDS
Do you currently need to hire workers who have skills in automation and robotics? (Total Responses = 103)
What are the specific job titles associated with automation and robotics skills at your company? (Total Responses = 14)
19% Need Workers To Supervise Production

Do you currently need to hire workers who are responsible for supervision of production? (Total Responses = 103)
56% Need Skilled Production Workers

Do you currently need to hire workers who are responsible for skilled production? (Total Responses = 103)
What are the specific job titles associated with skilled production jobs at your company? (Total Responses = 58 (88 with multiple entries)
What are the specific job titles associated with skilled production jobs at your company? (Total Responses = 58 (88 with multiple entries)
In which workforce segments do you anticipate the greatest hiring challenges during the next 3-5 years? Check all that apply. (Total Responses = 176)

- Skilled Production (production machinists, operators, craft workers, distributors, technicians)
- Engineering Technologists (industrial engineers, manufacturing engineers, planners)
- Sales and Marketing
- Unskilled Production
- Scientists and product design engineers
- Customer Service
- Management and Administration (HR, IT, finance, executives)
- Other

Greatest Hiring Challenges Next 3-5 Years

<table>
<thead>
<tr>
<th>Segment</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Skilled Production</td>
<td>38%</td>
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<tr>
<td>Engineering Technologists</td>
<td>20%</td>
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<tr>
<td>Sales and Marketing</td>
<td>11%</td>
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<tr>
<td>Unskilled Production</td>
<td>9%</td>
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<tr>
<td>Scientists and product design engineers</td>
<td>7%</td>
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<tr>
<td>Customer Service</td>
<td>6%</td>
</tr>
<tr>
<td>Management and Administration (HR, IT, finance, executives)</td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>7%</td>
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SKILLS GAP?
Skills Gap? 71% Say Yes

Do you believe there is currently a skills gap in terms of workers you need and those you can find in Sarasota and Manatee Counties to fill jobs?  (Total Responses = 103)
Skills Gap For How Long?  69% Say 3+ Years

How long do you think the local skills gap has been going on in your company?
(Total Responses = 85)
REASONS FOR SKILLS GAP
Gap: Local Area Students Are Not Choosing Manufacturing Jobs As Career

How strongly do you agree with the following possible reasons for a local skills gap? Local students are not choosing manufacturing jobs as a career. (Total Responses = 84)
How strongly do you agree with the following possible reasons for a local skills gap? Workers with high technology or advanced production skills needed are not available to hire locally. (Total Responses = 84)
How strongly do you agree with the following possible reasons for a local skills gap? Local schools are not preparing workers with the advanced skills needed to succeed in manufacturing today (Total Responses = 84)
Gap: Basic Skills Are Not Being Acquired By Workers In Local Schools

How strongly do you agree with the following possible reasons for a local skills gap? Basic skills are not being acquired by workers in local schools. (Total Responses = 84)
How strongly do you agree with the following possible reasons for a local skills gap? Customized, in-house training is needed and educational partners don't offer it. (Total Responses = 84)
How strongly do you agree with the following possible reasons for a local skills gap? Due to the diversity of manufacturing in the two county area there is no specific focus or critical mass for manufacturing here. (Total Responses = 84)
How strongly do you agree with the following possible reasons for a local skills gap? There is no formalized process for manufacturers to tell community what workforce needs are. (Total Responses = 84)
How strongly do you agree with the following possible reasons for a local skills gap? Community partners are not working collaboratively to help manufacturing with worker needs. (Total Responses = 84)
AWARENESS OF MANUFACTURING COMMUNITY SUPPORT
Which community partners, if any, are you currently working with for your hiring and training needs? Check all that apply. Total Responses = 208

- Suncoast Workforce: 23%
- Manatee Technology Institute: 12%
- Manatee EDC: 12%
- SAMA: 11%
- State College of Florida: 9%
- EDC of Sarasota County: 6%
- Sarasota County Technical Institute: 4%
- ITT: 3%
- Other: 2%
- None: 17%
- Don’t know/refuse: 1%
How would you rate your overall satisfaction with community partners such as those in the prior list for serving the needs of manufacturing for hiring and training? Would you say you are … (Total Responses = 102)
What community efforts to help the manufacturing workforce are you aware of? (Total Mentions =41 (50 = multiple entries)
What community efforts to help the manufacturing workforce are you aware of? (Total Mentions = 41 (50 = multiple entries)
Have you heard of the following community efforts currently underway to help manufacturing with hiring and training? (Total Responses = 102)

Yes:
- Six Sigma Lean Training: 35%
- Banner Center/Polk County Robotics Program: 18%
- Manufacturing Pathway at LWR H.S.: 8%
- Mentor and Internship Programs-local schools: 24%
- Specific Company Training-local schools: 14%

No:
- Not Sure: 59%
- Yes: 79%
- No: 85%
- Yes: 71%
- No: 81%

Not Sure:
- Not Sure: 6%
- Yes: 3%
- No: 7%
- Yes: 5%
- No: 5%
Have you heard of the following manufacturing certifications? Total Responses = 102

- MSSC Certified Production Technician (CPT)
- National Institute for Metalworking Skills
- American Welding Society's (AWS) Certified Welder
- American Society for Quality ASQ Certification

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<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Not Sure</th>
</tr>
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<tbody>
<tr>
<td>MSSC CPT</td>
<td>37%</td>
<td>58%</td>
<td>5%</td>
</tr>
<tr>
<td>NIEMS</td>
<td>21%</td>
<td>72%</td>
<td>7%</td>
</tr>
<tr>
<td>AWS Certified</td>
<td>51%</td>
<td>42%</td>
<td>7%</td>
</tr>
<tr>
<td>ASQ Certification</td>
<td>54%</td>
<td>40%</td>
<td>6%</td>
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</tbody>
</table>
What do you think community partners such as government, associations or educational institutions should be doing to help support manufacturing hiring and training needs? (Total Responses = 102; Total Mentions= 55)
<table>
<thead>
<tr>
<th>Suggestion</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Visit Manufacturers On Personal Basis</td>
<td>2%</td>
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<tr>
<td>Incentive For Hiring Apprentices</td>
<td>2%</td>
</tr>
<tr>
<td>Work More Collaboratively As Region</td>
<td>2%</td>
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<tr>
<td>Help With Zoning</td>
<td>2%</td>
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<tr>
<td>Training &amp; Emp. Incentives To Diversify Business</td>
<td>2%</td>
</tr>
<tr>
<td>Market Area As Manufacturing Hub</td>
<td>2%</td>
</tr>
<tr>
<td>Cross Industry Meet and Greet</td>
<td>2%</td>
</tr>
<tr>
<td>Focus Local Government To Help Manufacturing</td>
<td>2%</td>
</tr>
<tr>
<td>SCTI Should Do More</td>
<td>2%</td>
</tr>
<tr>
<td>Teachers Visit Employers</td>
<td>2%</td>
</tr>
<tr>
<td>Comm. College Respond To Open Positions</td>
<td>2%</td>
</tr>
<tr>
<td>More Math For Kids</td>
<td>2%</td>
</tr>
<tr>
<td>Help Workers With Motivational Skills</td>
<td>2%</td>
</tr>
<tr>
<td>Help Existing Employees Be Better Citizens</td>
<td>2%</td>
</tr>
<tr>
<td>Summer Work Programs with Teens</td>
<td>2%</td>
</tr>
</tbody>
</table>

What do you think community partners such as government, associations, and educational institutions should be doing to help support manufacturing hiring and training needs? ((Total Mentions =55)
RESPONDENT DEMOGRAPHICS
Which of the following titles best represents your position in the company?

(Total Respondents = 112)
Which of the following titles best represents your position in the company?  (Other = 21)
What county is your manufacturing operation headquartered in?  
(Total Respondents = 110)
How many years has your business been in operation in Sarasota or Manatee County? (Total Responses = 101)

- Less than one year: 2%
- 1 to 5 years: 17%
- 6 to 10 years: 11%
- More than 10 years: 70%
Number of Employees

How many employees does your company have?
(Total Responses = 107)

- 100+: 25%
- 11-99: 44%
- 5-10: 17%
- 4 or fewer: 14%
Including yourself, how many FULL-TIME employees do you have working in Sarasota or Manatee County? (Total Responses = 100)
50% Have More FT Employees Than Last Year

Is the number of full-time employees more, the same or less than you had at this time last year? (Total Responses = 100)
RECOMMENDATIONS/NEXT STEPS
Skilled Production Workers Are Top Need For Region at 56%

- Not having skilled production workers is one of top reasons for the skills gap at 75%
- 41% of jobs have gone unfilled for skilled production
- 38% have worker shortages in skilled production
- Skilled production workers were identified as greatest hiring challenge in next 3-5 years at 38%
Skilled Production – Possible Next Steps

• Skilled production job title fragmentation suggests apprenticeship training or other flexible training models where workers are not taken off the floor

  ❖ More specialized training is one of the top ways to support manufacturing at 5% of mentions
  ❖ Most jobs unfilled fall into the 1-3 range at 45%
  ❖ Job titles should be further analyzed by an industry expert to determine if a core set of skills can be established for local education partners

• Consider on the job training programs to prepare workers for supervision positions (19% need supervision of production workers)
Automation and Robotics Smaller Need at 14%  

But:
- Jobs unfilled for engineering technologists, scientists and product design engineers were at 27%  
- Next highest worker shortage now is for these job titles at 18%  
- Greatest hiring challenge in 3-5 years is 27% for this group
Automation and Robotics – Possible Next Steps

• Consider identifying some of the companies who have this need and work with them directly for specialized training (could these be larger more advanced employers?)

  ❖ Only 14% had heard of specific company training through local schools

  ❖ Only 18% had heard of the Polk County Banner Center Robotics program
Possible Emerging Worker Shortages/Needs?

- Sales and marketing led unskilled production at an 11% shortage today and 13% for jobs unfilled
  - Unskilled production was 9% shortage and 6% jobs unfilled
  - Future retirement of many experience workers
60% Are Unsure of Any Efforts To Support Manufacturing

- 46% don’t know what community partners should do to help manufacturing

- 59% or more had not heard of any community efforts to support manufacturing

  - When asked if aware of specific community efforts to support manufacturing, the highest percentage had heard of Six Sigma Training at 35%
  - More had heard of manufacturing certifications than local efforts but the highest was American Society for Quality Certification at 54%

- 44% are somewhat to very satisfied with community partner support for manufacturing hiring and training needs

  - 25% didn’t know how to answer
Manufacturers Are Hiring!

- 50% have more full time employees than last year
  - 37% have 1-3 jobs open now
  - 28% have 4-10 jobs open now
  - 45% have had 1-3 jobs go unfilled for three months or more
  - 11% have had 4-10 jobs go unfilled for three months or more
  - 41% of unfilled jobs are in skilled production
Where Should CareerEdge Invest?

• Develop and lead a new regional coalition or alliance of manufacturers, educators and partners to provide one regional point of contact for manufacturing support
  
  ❖ The alliance should develop a workforce plan for manufacturing for the region

• Work with local schools and manufacturers to bring awareness to skilled production manufacturing jobs

• Fund and provide apprenticeship and work experience programs for manufacturers for skilled production jobs
One Regional Coalition for Manufacturing

• Establish a regional coalition or alliance of manufacturers, educators and government

  - One point of contact where community partners can communicate plans and resources to manufacturers—and manufacturers can provide their needs to partners in an immediate, actionable way

  - 60% of manufacturers don’t know what community partners are doing now; top support community partners can give manufacturing is one web site to connect manufacturers and schools at 5% of mentions and communicate training and funding at 4%; totaling 9% of mentions

  - Manufacturers are tired of providing their input to many different entities with no actionable results; this would show we are working together as a community to respond
Manufacturing Education and Awareness In Local Schools

• Start educating/training earlier in middle and high schools for core production skills and build awareness of manufacturing careers as an option
• Develop and implement a marketing plan for students and parents to increase awareness

❖ Top two reasons for skills gap include Local Students Are Not Choosing Manufacturing Jobs As Career at 77% and Local Schools Not Preparing Workers with Skills Needed in Manufacturing at 75%
❖ Top way to support manufacturing is focus students on manufacturing careers at 7% of mentions and offer training in local tech school for region at 4%; total of 11%
❖ Only 24% had heard of mentor or internship programs with local schools
❖ Only 8% had heard of the manufacturing pathway at Lakewood Ranch High School
Apprenticeship Training and Work Experience Programs

- Manufacturers need to open doors to apprenticeship training and work experience programs to involve students/potential employees earlier in learning skilled production

- Educators need to help manufacturers by promoting awareness within schools and helping them gain access to interested students

- A similar model is in healthcare, where students do clinical rotations
Recommendations

• Manufacturers commitment to the development of programs and to hire newly graduated students from local machining programs

• Organize a single regional point of contact and implementation for manufacturers and community partners; develop and implement a manufacturing workforce plan for the region

• Build awareness of manufacturing careers locally

• Prepare local students and current workers to succeed in manufacturing jobs of the future