

MAGNET'S 2018 NORTHEAST OHIO MANUFACTURING SURVEY: EXECUTIVE SUMMARY

HEADLINE

The survey definitively shows that product innovation leads to more growth, while “grow your own workforce” strategies will be needed to fill the major labor shortages hampering small manufacturer growth. Emerging technologies like the Internet of Things (IoT), 3D printing, and digital manufacturing are beginning to enhance innovation and productivity, but still have significant room for adoption amongst Ohio’s small manufacturing businesses.

ABOUT THE SURVEY

Under the direction of the Ohio Manufacturing Extension Partnership (Ohio MEP), MAGNET: The Manufacturing Advocacy and Growth Network conducted a thorough survey of Ohio’s manufacturing base. Contributing approximately 20% of Ohio’s jobs (and driving in some regions up to 50% of Ohio’s economy), and generating a disproportionate amount of export revenues and Gross Regional Product, manufacturing is critical to Ohio. Greater than 95% of Ohio’s manufacturers are small (under 500 employees), and these manufacturers need to remain competitive both nationally and internationally to ensure our economy’s health. Ohio’s Development Services Agency and the National Institute of Standards and Technology, which runs the MEP, recognizes the importance of this sector and fuels MAGNET and the Ohio MEP program to directly serve and support innovation, efficiency, and growth in small and medium manufacturers. What manufacturers need today is not the same as what they needed 10 years ago. Cybersecurity, internet of things, automation, workforce shortages and more mean that getting to know the economic drivers themselves is increasingly important. This summary shares the major concerns, insights, and facts that face our region and our small and medium manufacturers.

Key partners and supporter include:



More than 400 Northeast Ohio Ohio manufacturing companies took this survey, representing nearly 8% of manufacturers in the region, the majority of whom were C-level or plant managers, making this the largest survey of its kind. Most companies were well-

established (10+ year in business), and they ranged in all sizes of employment and manufacturing industry sectors. Geographically, the companies were from all over Northeast Ohio, but were concentrated in counties with significant manufacturing bases like Cuyahoga, Stark, Lorain, Summit, and Lake. As you will see below, optimism remains high, productivity will continue to grow, innovation and use of technology is increasing, and while more is being done to address workforce shortages, the problem still looms large.

KEY TAKEAWAYS

Manufacturers are feeling good. Optimism for 2018 is extremely high – 86% of respondents expect their revenues to grow this year, and 58% plan to make capital expenditures.

Tax reform helps, but other regulations are still concerning. Tax reform was definitely a positive for manufacturers, who report that they plan to invest in both their wages and in equipment this year because of these changes. However, they are still very concerned with other government regulations that cost money and hamper growth with top concerns around EPA, OSHA, and healthcare costs.

Productivity will continue to grow with automation. Manufacturing productivity continues to grow with steady employment in the sector – more product, more company revenue, better wages, and even more difficulty finding people for these jobs.

- Automation plays a significant role in increasing productivity – 40% of respondents use some automation
- 55% of small companies say that they are looking for more automation this year

Innovation, Technology, and Growth

Manufacturers are more innovative and are winning because of it. Innovation in new products and new services is a winning growth strategy, leading to higher revenue growth than customized services, superior customer service, better quality, or lower price.

- There is more innovation happening – 70% of small companies have launched a new product in the last year, up 15% from previous year.
- Use of 3D printing has doubled to 30% of small companies.

IOT, 3D printing, and other technologies are important but underutilized. These emerging technologies are not well incorporated into small companies yet.

- IoT (the Internet of Things) will revolutionize productivity in companies who deploy it well, but only 16% of companies are dabbling with it.
- Use of big data can drive different ways of thinking about business, but only 10% of companies are thinking about this.
- Awareness of 3D printing for common applications is growing, but more sophisticated uses (like in tooling) remains low (7%) among manufacturers.

Everyone is aware of cybersecurity and online hacking, but not enough companies formally protect themselves. As machines and devices become interconnected, companies recognize the need to protect themselves from cyber threats: with 67% of respondents saying it's a growing concern, cybersecurity was #1 for most-concerning trend. However, many do not realize the need for formal assessments.

- 64% of respondents say that they understand cybersecurity and have taken steps to protect themselves (up 10% from previous year)
- Only 22% of companies have undergone a formal assessment of how well they are doing at protection

Workforce Shortage

An inability to hire enough employees is hampering growth in big ways... No matter the growth prospects of our sector, manufacturers still rank attracting skilled workers as their #1 challenge hampering their growth – twice the number of manufacturers in 2018 said that the shortage will affect their bottom line (9% last year to 19% this year). Over 40% of respondents said their workforces grew 5% or more in 2017, and fully 62% of respondents expect to grow their company's workforce in 2018.

- The biggest issue with hiring that manufacturers have is that applicants don't have enough skills or education (34%)
- Applicants don't have the work ethic or interest (27%)
- There just aren't enough applicants (15%)

..but it's not drug issues that drive the shortage... Surprisingly, drug issues are not a major issue hampering finding qualified candidates, but rural counties are affected more than urban manufacturers. Fully 50% of respondents said drug use is not affecting their business; only 7% of companies said new applicants can't pass the drug test.

...and manufacturers don't expect a rise in retirements in the next 3 years. Upcoming retirements are also not as big a concern to the majority of manufacturers: 92% of manufacturers are expecting less than 15% retirements in the next 3 years, with most expecting under 5%.

Manufacturers are working hard to fix the issues, adapting their hiring practices to widen their talent pipelines. Manufacturers are taking action to solve these problems:

- 65% actively working to transfer knowledge from veteran workers to young workers
- 58% plan to increase wages
- 49% offer tuition reimbursement
- 40% are collaborating with higher-ed institutions and high schools
- 47% are open to hiring ex-offenders (under the right circumstances)

Growing your own talent is even more critical for the future. More companies will need to engage with training in “grow your own” strategies in the future as demand for individuals with technical training **doubled from 35% of manufacturers searching for this role to 69%.**

There still isn't enough hiring innovation happening. Still the major ways to recruit and grow talent are not highly varied or innovative:

- More than 70% of manufacturers rely on online job postings and employee referrals for their talent and 58% use a recruiter
- Only 30% actively recruit through colleges, training center, career centers, etc.
- Only 12% have formal apprenticeships

MAGNET's 2018 Northeast Ohio Manufacturing Survey was conducted in coordination with Team NEO's Quarterly Economic Report, with the results being released widely starting February 13, 2018.

