

ThomasNet's



INDUSTRY MARKET BAROMETER®



SURVEY FINDINGS | NOVEMBER 2014

## THOMASNET® SURVEY SHOWS BUSINESS TRENDING UP FOR MANUFACTURERS

But Will Progress Be Sustainable Without an Infusion  
of Younger Workers?

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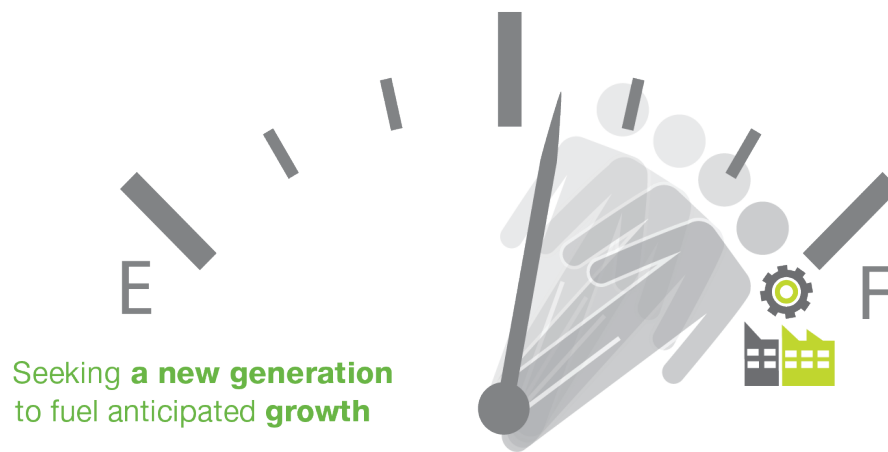
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## EXECUTIVE SUMMARY

The news for the general economy may be mixed, but for manufacturers it's "all systems growth." ThomasNet's annual Industry Market Barometer® survey of North American manufacturers shows an upward trajectory for this sector, year after year, as they continue to lead the economy forward. These companies are growing, hiring, adding new lines of products or services, and investing for more growth to come. More than half (58 percent) grew in 2013, and 63 percent expect to grow by the end of 2014.

Positive indicators are everywhere. Manufacturers are getting more business from their existing markets, and their average account values are rising. Nearly eight out of ten (76 percent) are now selling overseas, and 33 percent of them expect this to rise, too. In anticipation of what's ahead, they're increasing their production capacity, optimizing their manufacturing operations, and upgrading their facilities. Hiring and retraining staff are top priorities to help them scale. More than half (52 percent) of these manufacturers expect to add staff over the next several months, up from the 42 percent who planned to hire last year.

### Troublesome Trends

A deeper look at this year's survey results raises concerns about whether manufacturing is sufficiently prepared to handle continued growth. For the industry to sustain its steady climb, all the fundamentals need to be in place, and one of them is missing – a robust pipeline of skilled workers. Having the people to operate the machines, work the lines, and create new products is mission-critical. Yes – manufacturers are hiring and developing their people – but to keep up with the opportunities at hand, they will need to recruit faster, smarter, and harder.

Last year's IMB called attention to the "ticking biological clock" – the disruption that is coming as Baby Boomers leave the workforce in accelerating numbers, without people primed to replace them. This year, 38 percent of manufacturers report that they'll leave their jobs in one to ten years, and most lack a plan to fill their shoes.

And with over 200,000 jobs still unfilled, manufacturers can't afford to wait for new talent to walk in the door. They tell us they need skilled, experienced people – line workers, skilled trade workers, engineers, and manufacturing/production management – and they're nowhere to be found. If last year was a ticking clock, this year is ringing alarm bells.

Yet, one solution is in plain sight – formulating plans to attract the generation of Millennials (ages 18-32) who will comprise about 75 percent of the workforce by 2025. For an industry that values specialized training and experience, this generation represents a goldmine of opportunity as most Millennials are technology-savvy. Manufacturing is increasingly headed towards digitization and very much reliant on this skillset. Whether changing careers or just entering the workforce, they can take the time to learn the business before their predecessors retire. Yet, most manufacturers (62 percent) say Millennials represent a small fraction of their workforce, and eight out of ten (81 percent) have no explicit plans to increase these numbers.

### **Baby Boomers' Perceptions of Millennials Impede Their Own Growth**

This year's data shows that the manufacturing industry increasingly aligns with Millennials' value systems and technology expertise. The research demonstrates that Millennials have an opportunity to make a social impact working with sustainable and green technologies, solar energy, and wind power. In addition, respondents cite innovations in design and manufacturing software, automation/robotics, and 3D printing as intrinsic to today's jobs.

Eighty percent of IMB respondents are Baby Boomer age or over. On the one hand, these manufacturers don't see their industry as a place for Millennials. 46 percent of respondents say that a larger issue is at work – younger people still perceive manufacturing as “blue collar” work. And Baby Boomers' perceptions of Millennials exacerbate the challenge. Forty-three percent of respondents believe that this generation lacks the work ethic and discipline to succeed.

One bright spot that can help bridge intergenerational barriers is apprenticeship programs. Last year's IMB respondents were advocating for them, and this year, a small number are using them to teach skilled trades such as machining, production, assembly, CNC milling and turning, and welding. Manufacturers see these programs as a way to fill skill gaps and get new talent into place. But until misunderstandings on both sides are erased, the manufacturing community won't be able to fully participate.

In short, the manufacturing sector is at a crossroads. To take its rightful place as a growth leader, this sector must embrace the future workforce that will get them there. The path has been laid for them to succeed, and the question is whether they'll act in sufficient time. The glory days for American manufacturing could be back again, for years to come. Closing the gaps between Baby Boomers and Millennials is critical to making this happen.

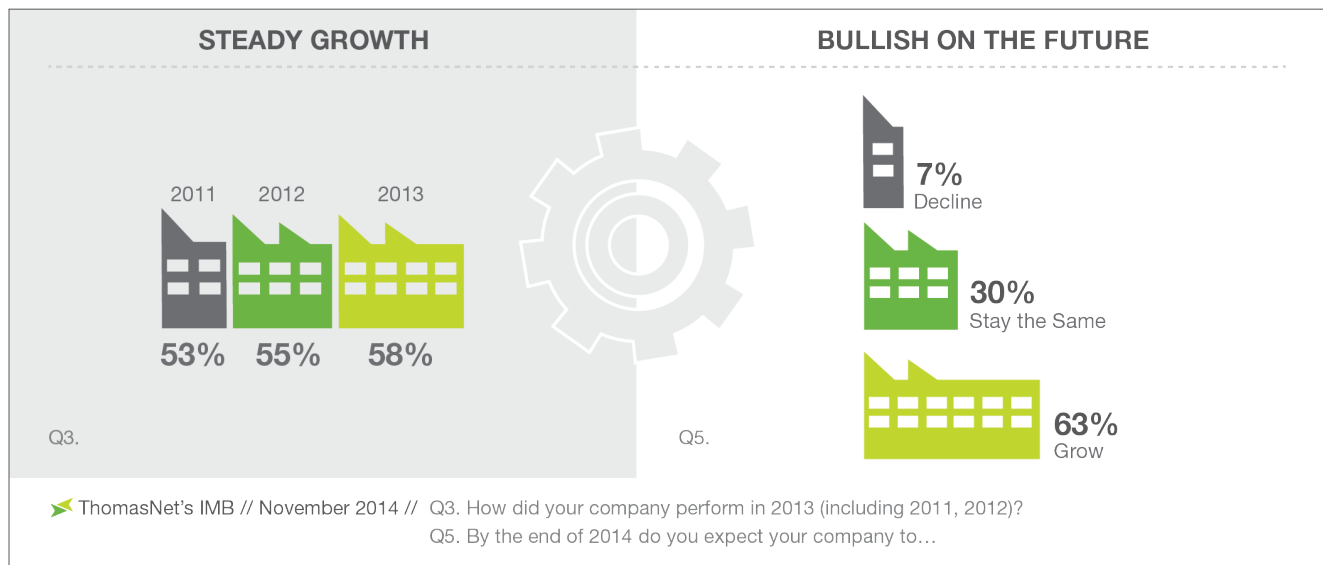
## DETAILED FINDINGS

ThomasNet's Industry Market Barometer is an annual survey of buyers and sellers of products and services in North America's industrial/commercial marketplace. No other survey probes so deeply into the performance, outlook and strategies of these smaller businesses.

This year, we focused our analysis on the 490 manufacturers who responded to the survey. The majority (60 percent) of these manufacturers represent small companies (fewer than 100 employees), mirroring the makeup of their sector. Respondents this year are mostly product manufacturers (67 percent) and custom manufacturers (33 percent). The respondents who provided data are primarily owners, executives and general managers.

### Growth Trend Continues

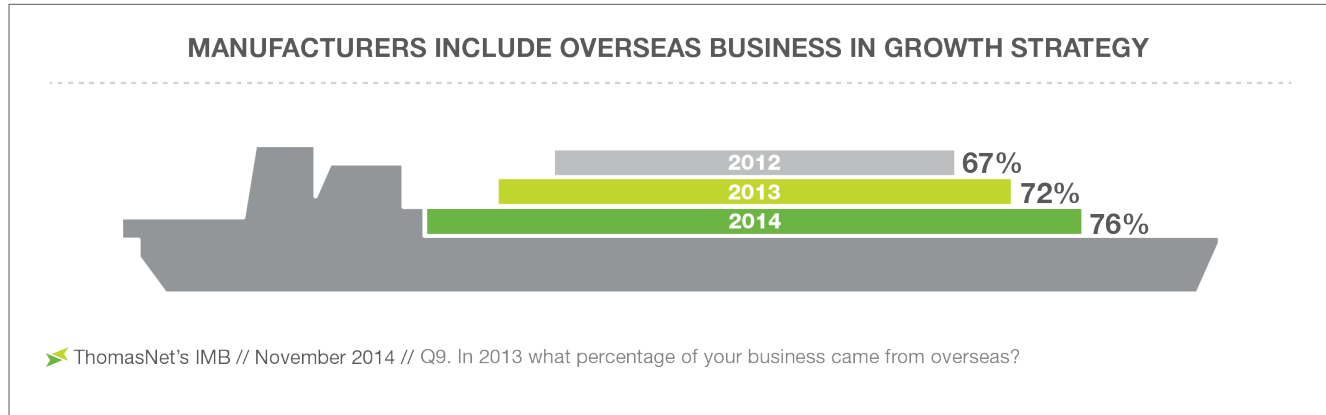
For the 3rd consecutive year, business is trending up for manufacturers. Of the nearly 500 North American manufacturers that responded, well over half (58 percent) reported business growth in 2013, and nearly two-thirds (63 percent) expect increases this year.



## Where the Growth Comes From

Manufacturers attribute growth to a number of strategic areas. More business in core, existing markets (78 percent) tops the charts, followed by increases in average customer account value (48 percent), and sales of new product or service offerings (28 percent).

Manufacturers continue to invest and do business overseas, too. Year over year this has grown with a full 76 percent citing some form of overseas business as part of their growth strategy. In the coming year, one third of them (33 percent) expect overseas business to increase.



## Factors Contributing to Growth

Interestingly, how manufacturers plan to grow remains consistent year over year. Manufacturers' websites (56 percent) top the list of tactics that impact their ability to secure new business, followed by expanding their sales force (42 percent), events/tradeshows marketing (40 percent), customer service initiatives (32 percent), and expanding distributor networks (28 percent). Nearly 7 out of 10 (68 percent) manufacturers see domestic reshoring as an opportunity for additional growth.

## How Manufacturing is Evolving

Manufacturers cite five key areas as having a significant impact on their companies in the next two years:

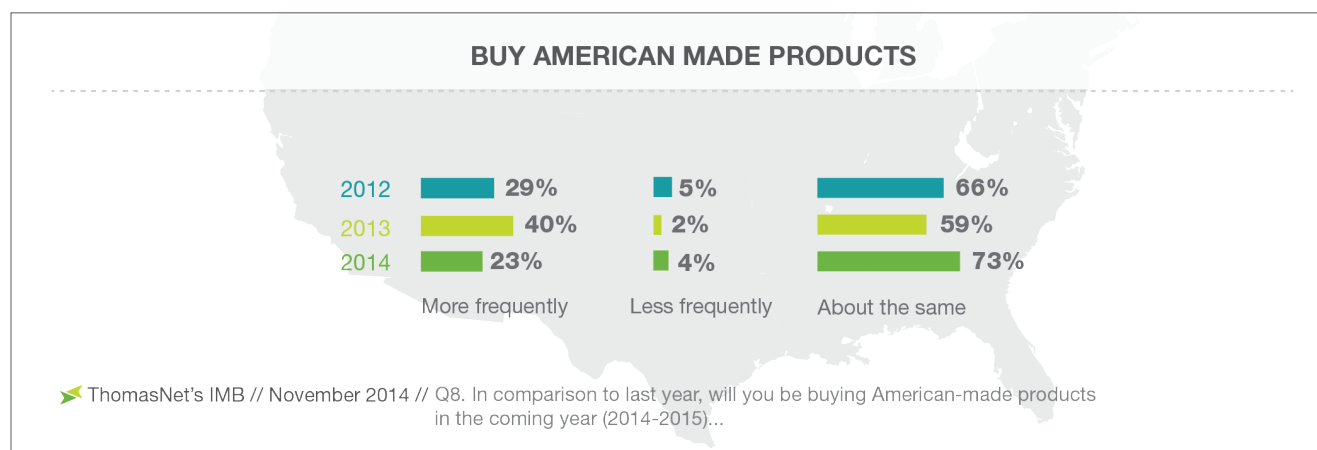
-  1 Sustainable and green technologies
-  2 Advanced materials
-  3 Design and manufacturing software
-  4 Automation and robotics
-  5 Recycling and remanufacturing

While lower on the list, additive manufacturing/3D printing and energy related technologies (i.e. solar, wind) are also mentioned.

In past IMB surveys, sustainable and green initiatives were always at the bottom of the priority list. Anecdotaly, “being green” is now perceived as advantageous to manufacturers due to a rise in customer expectations as well as the availability of more affordable implementation. As a reaction to this new reality, more manufacturers and their suppliers are incorporating green initiatives into their operations.

## Made in America

Interestingly, when respondents were asked whether they would they buy American made products more frequently next year versus last, less than one quarter (23 percent) said they would. Last year appeared to be the tipping point at 40 percent while nearly three quarters (73 percent) said they would buy American made products at about the same frequency.



## Future Investments

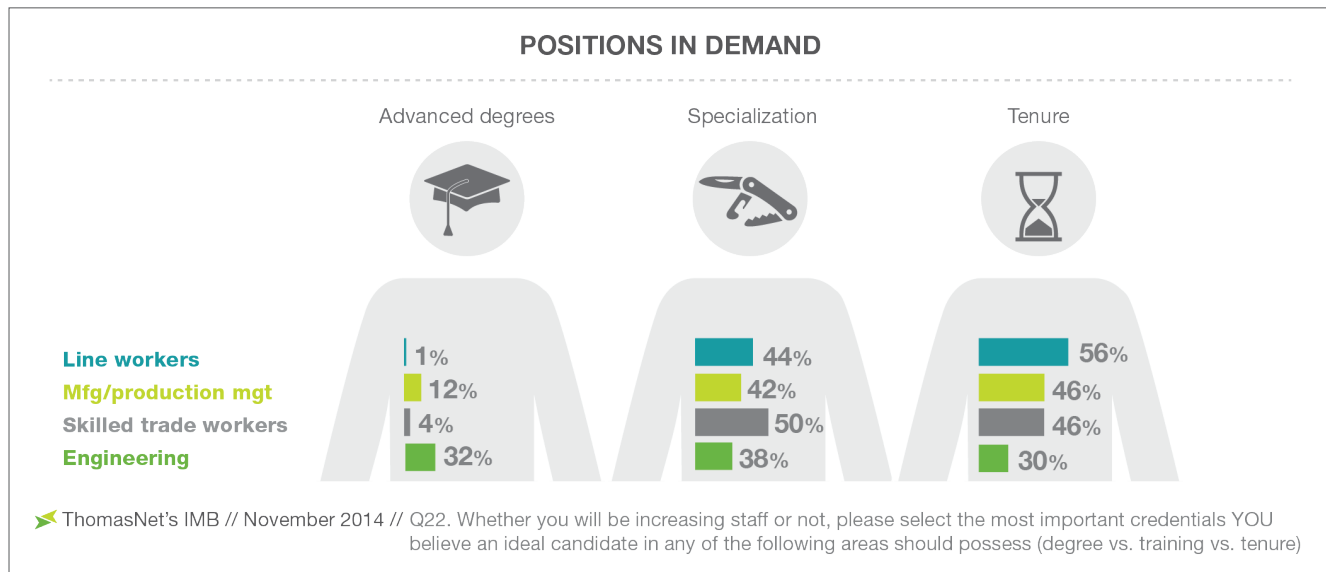
Nine out of ten manufacturers (97 percent) report that they will be directing resources in the year ahead toward competing more aggressively in their core markets and improving their customer retention and service (96 percent). Additional strategies include both increasing (91 percent) and developing existing staff (94 percent).

These companies are also making capital investments to support growth. Increasing production capacity, optimizing manufacturing operations and upgrading facilities reflect the need to accommodate increased production.

## Demand for More Workers, Skills Gap Still Exists

In response to positive growth forecasts, hiring is on the upswing, with 52 percent of manufacturers expecting to increase their headcount by June 2015. This is 10 percent more than last year (42 percent).

Companies say the key areas needing staff are line workers (60 percent); manufacturing/production management (54 percent); skilled trade workers (53 percent); and engineering (50 percent). Also, when asked what they believe an ideal candidate in these same areas should possess - tenure and specialization outweigh advanced degrees.

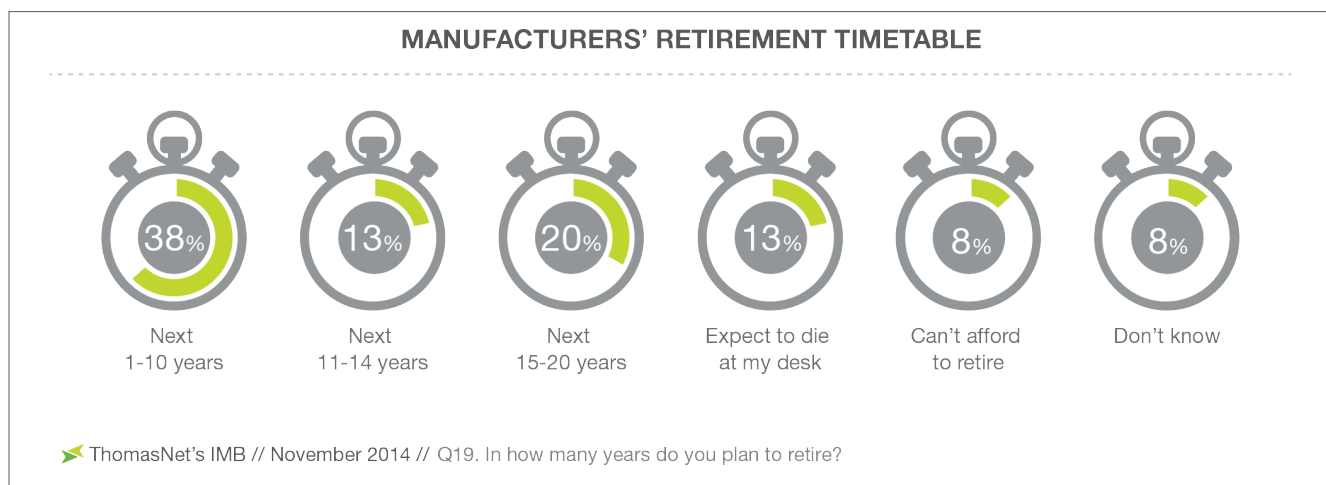


Last year, manufacturers said hiring was one of their biggest challenges. Anecdotally, this continues to be a critical concern for them.

### Troublesome Trends

Manufacturing is dominated by a Baby Boomer audience with over 80 percent of IMB respondents between the ages of 45-65+. Nearly half (49 percent) are 55 and older.

When asked when they plan to retire, 38 percent say within the next ten years. Unfortunately, 65 percent say there is NO succession plan in place to fill their position.





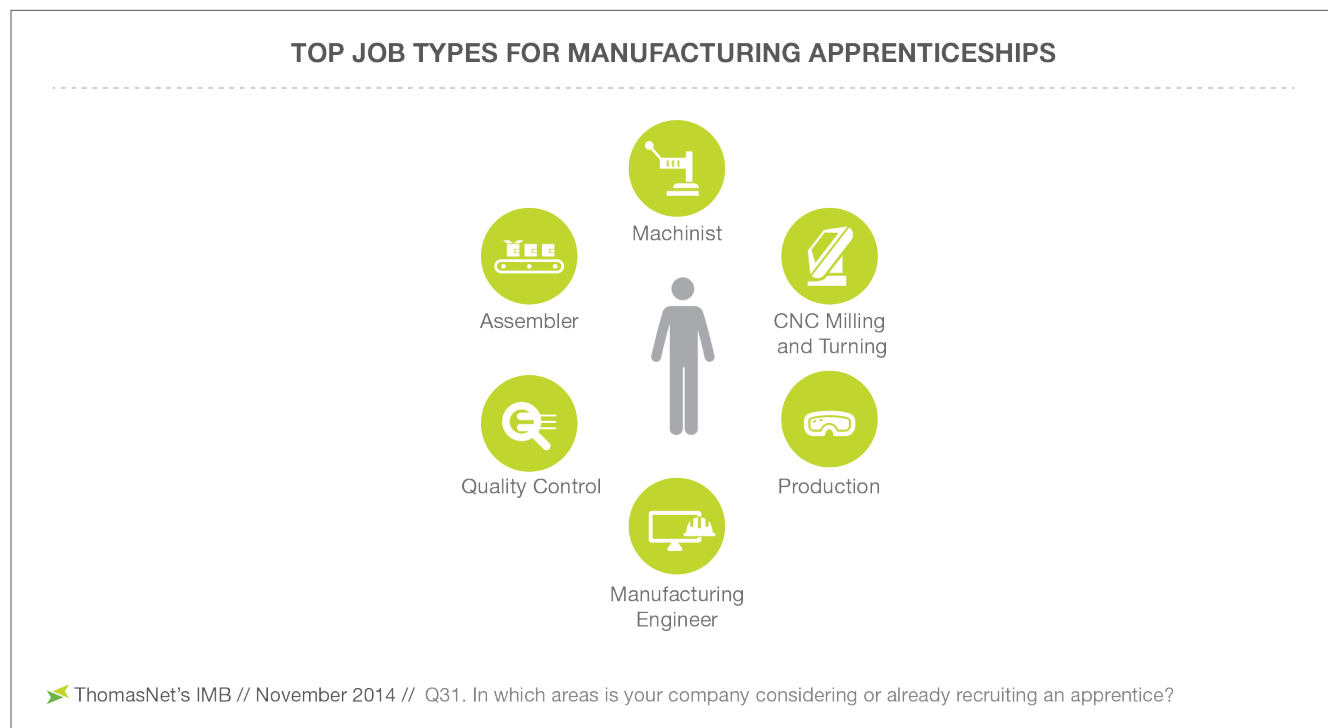
Last year, we reported on the untapped workforce of Millennials (ages 18-32), which is expected to comprise about 75 percent of the national workforce by 2025. Six out of ten (62 percent) manufacturers employ a small number of Millennials (25% or less).

Moreover, an alarming number of companies (56 percent) say that they expect this number to stay the same in 2015. In addition, 8 out of 10 (81 percent) manufacturers have no explicit plans to increase the number of Millennials that they employ.

With so many manufacturers planning to hire in 2015 – and the fact that many Baby Boomers are retiring – it’s surprising that more manufacturers don’t have a plan to bring on more Millennials to fill the pipeline.

### One Possible Solution

There is one area where respondents do appear to be making headway – developing Apprenticeship programs. For those manufacturers where an apprenticeship program is applicable, a little over half (51 percent) have a program in place and 23 percent have a program planned.



### Lingering Issues Threaten Future

Respondents shared their views on apprenticeship programs and the Millennial generation. An overwhelming number perceive apprenticeships as a viable opportunity for manufacturers to bridge the skills gap, and believe that these types of programs can contribute to their success. For the most part, manufacturers agree that these programs are a smart way to ensure that institutional intelligence and skills get transferred to the next generation.

These programs often offer mutual benefits for apprentices and manufacturers alike. Companies can tap into Millennials' technology skills while offering this generation an opportunity to learn their business.

However, there are a large number (43 percent) who feel that apprenticeships face an inherent issue – that Millennials lack the discipline and work ethic to succeed. Further, 46 percent of respondents feel that there is a larger issue at work, and that is a lingering “blue collar” perception of manufacturing. Strong anecdotal evidence supports this sentiment and raises concerns about manufacturers' overall ability to grow in light of these staffing challenges.

## Where Do We Go From Here?

Our IMB 2014 survey shines a spotlight on North American manufacturing's resilience and continued growth. Manufacturers are embracing new technologies, including sustainable and green tools, design and manufacturing software, automation and robotics, and more.

They continue to expand aggressively in core markets, and are investing in capital equipment, production capacity, optimizing manufacturing operations and upgrading facilities. Moreover, manufacturers continue to put resources into tactics that will secure new business with an eye towards domestic reshoring as an important growth opportunity.

Yet, there are issues ahead that could derail this high speed train. The desire and ability to attract the next-generation of workers will be the wild card that will either point manufacturers to further growth or will become their Achilles heel. The IMB reveals that this issue is reaching a mission-critical level with an aging workforce (over 8 out of 10 of the respondents were between the ages of 45-65+) and nearly 70 percent without a succession plan.

Respondents believe that Millennials may perceive manufacturing as a “blue collar” industry. In addition, they report that Millennials may lack a solid work ethic. All of this adds up to a serious concern that manufacturers may not be able or willing to hire and retain the number of Millennials necessary to sustain their extraordinary growth.

However, being aware of these issues is the first step toward solving them. North American manufacturing has always been able to adapt to changing market conditions. In fact, our survey reports that many companies are moving forward with apprenticeship programs that will lead the way for the next generation of skilled trade workers and further galvanize growth. As manufacturing continues to prosper, we must not rest on our laurels, but instead, we must re-double our energies to break new ground toward achieving continued success.

*“At a time when the American manufacturing sector is poised for a comeback, the talent shortage is the elephant in the room that could impede progress. It will take the concerted effort of every manufacturer to reach across generational lines, and bring in the people who are critical to the industry's continued success.”*

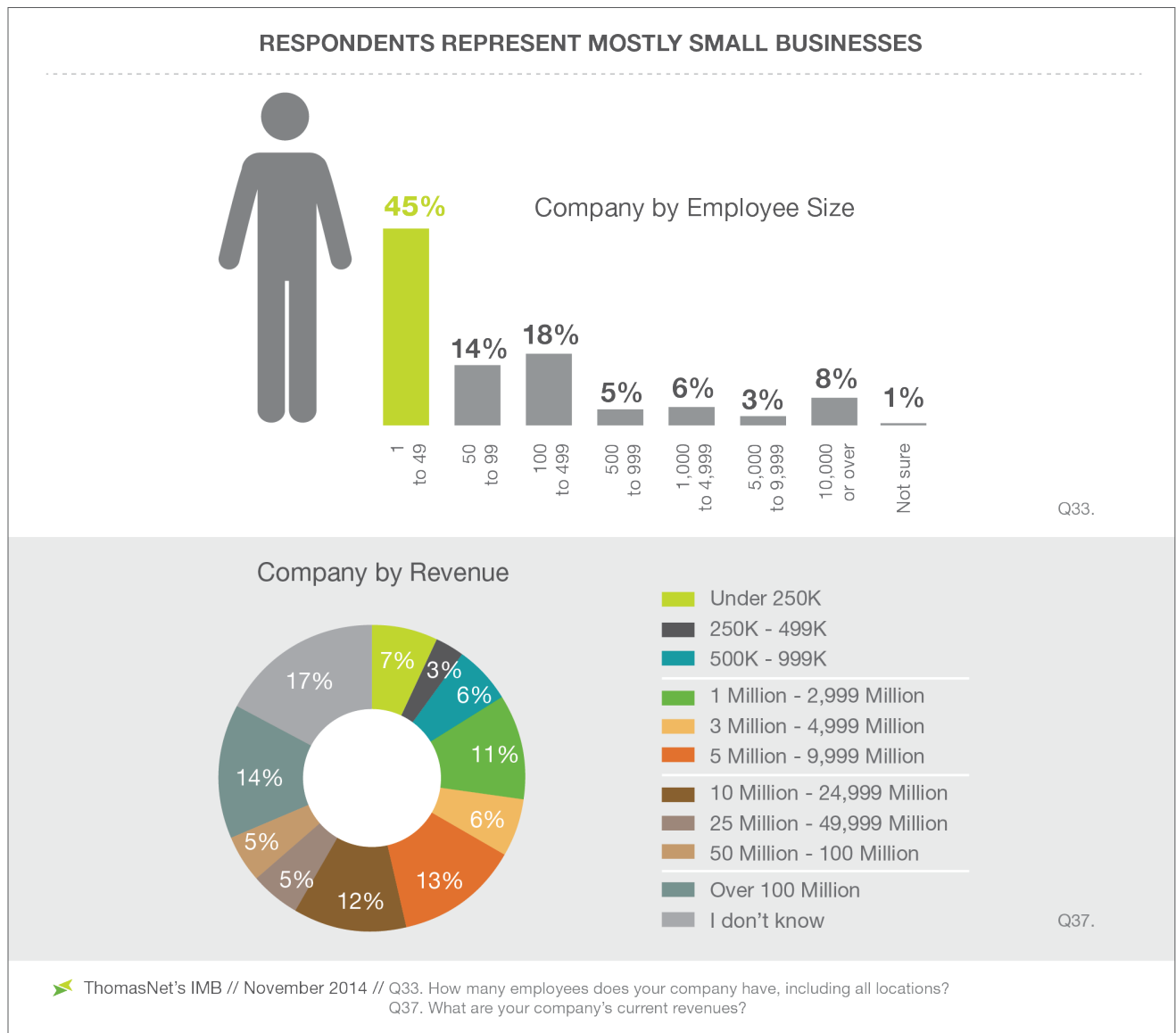
– Mark Holst-Knudsen, President, ThomasNet

## DEMOGRAPHICS

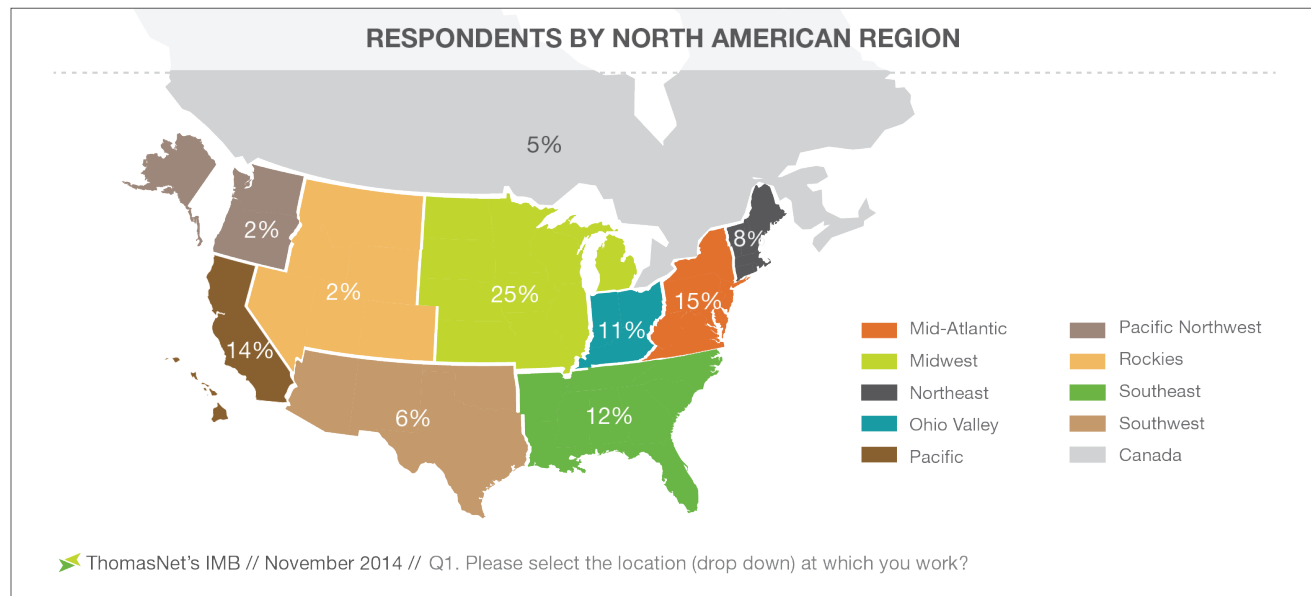
There were a total of 490 product and custom manufacturer respondents from North America, primarily the U.S. The overwhelming majority represents small and mid-size businesses [SMBs], mirroring the manufacturing marketplace, most notably:

- Over half (60 percent) of the companies are small, with up to 100 employees.
- 58 percent have annual revenues of less than \$25 million.

The respondents who provided data are primarily owners, executives and general managers. As buyers and sellers of industrial products and services, 67% are from manufacturing, durable or non-durable, and 33% are from custom manufacturing services companies.



## Respondents' Location



## METHODOLOGY

The Industry Market Barometer (IMB) 38 question survey was conducted during a 6-week period: August 4th, 2014 through September 8th, 2014.

Respondents were invited to participate through the following:

1. ThomasNet News' newsletter distributed weekly to over 400,000 users (procurement professionals, engineers, owners/managers) in corporations, educational institutions, government, military and small businesses.
2. The Industrial Marketer®, a weekly newsletter distributed to more than 40,000 owners/managers and sales/marketing professionals from product and custom manufacturers, service providers and distributors.
3. Outbound email to registered users and clients of ThomasNet.

## ABOUT THOMASNET®

ThomasNet provides solutions that make it easier for buyers and engineers to partner with the right suppliers. For nearly a century the Company's "big green books" – the Thomas Register – were considered indispensable to B2B buyers and manufacturers alike.

Today, ThomasNet offers tools to facilitate every step of the industrial/B2B buying process. This includes industry's leading supplier discovery and product sourcing platform, free online at [thomasnet.com](http://thomasnet.com).

The ThomasNet platform serves procurement professionals, engineers, plant and facility management and other buyers from corporations, educational institutions, government agencies, the military and small businesses. It also serves manufacturers, distributors, and service companies throughout North America who want to get found by these buyers.

### For more information:

- Buyers and engineers can go directly to [thomasnet.com](http://thomasnet.com) to access free sourcing information and tools.
- Suppliers can call **(866) 585-1191** or visit [business.thomasnet.com](http://business.thomasnet.com) to find out more about programs to help them get found by the ThomasNet.com audience. They can also inquire about ThomasNet RPM (Results Powered Marketing), a full service agency solution.

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