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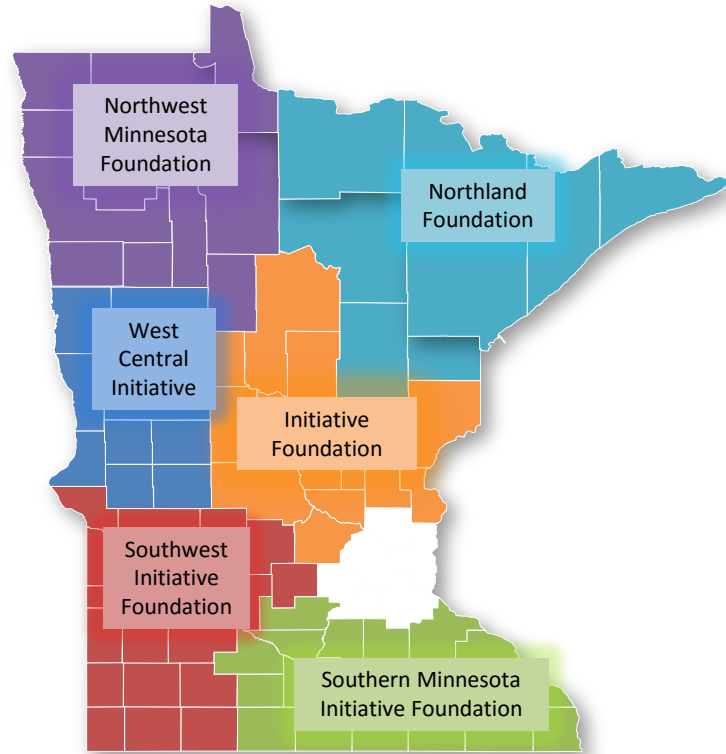
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2017 Survey of Minnesota Manufacturing Executives



-  On behalf of Enterprise Minnesota, Meeting Street Research is pleased to present the key findings from the ninth annual survey of manufacturing executives in Minnesota.
-  The survey was conducted March 1-21, 2017, among 400 manufacturing executives; it has a margin of error of $\pm 4.9\%$. Respondent titles included owners, CEOs, CFOs, COOs, presidents, vice presidents, and managing officers.
-  Rob Autry is the founder of Meeting Street Research, a public opinion research firm based in Charleston, SC.



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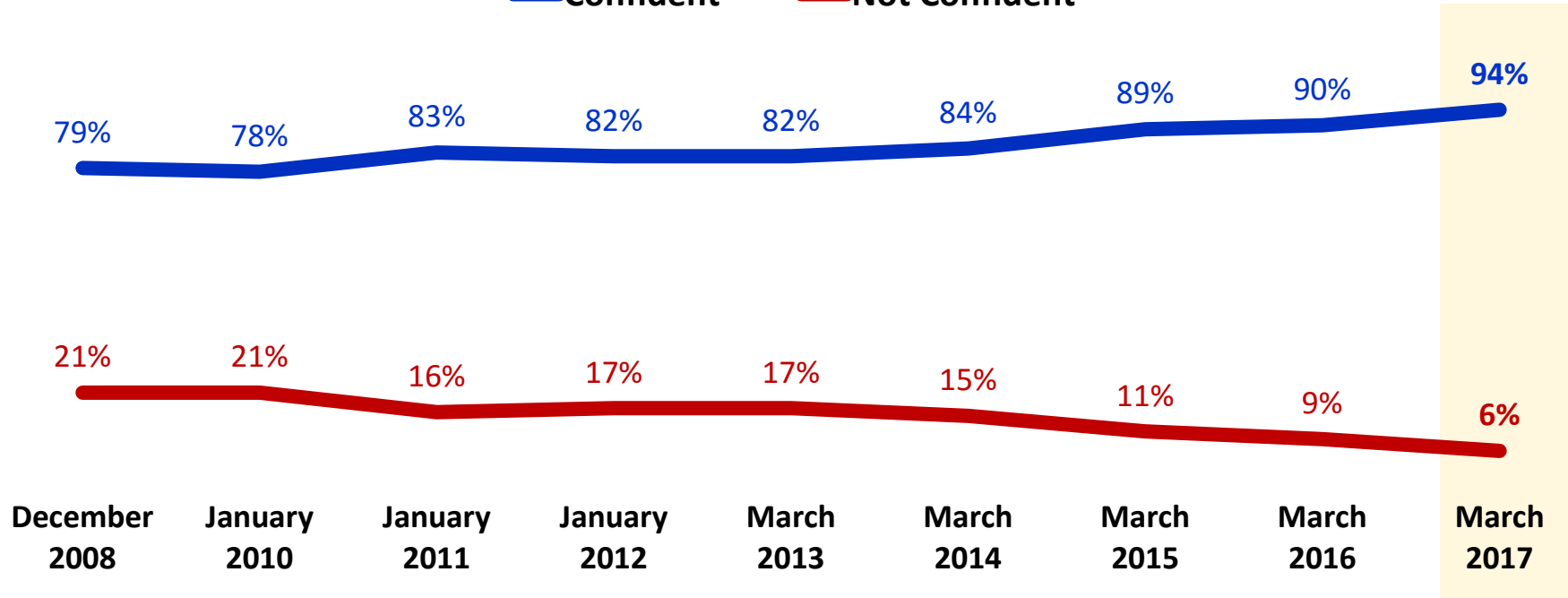
State of the Economy

After rising for the fourth straight year,
financial confidence is at an all-time high.



“From a financial perspective, how do you feel right now about the future for your company?”

— **Confident** — **Not Confident**

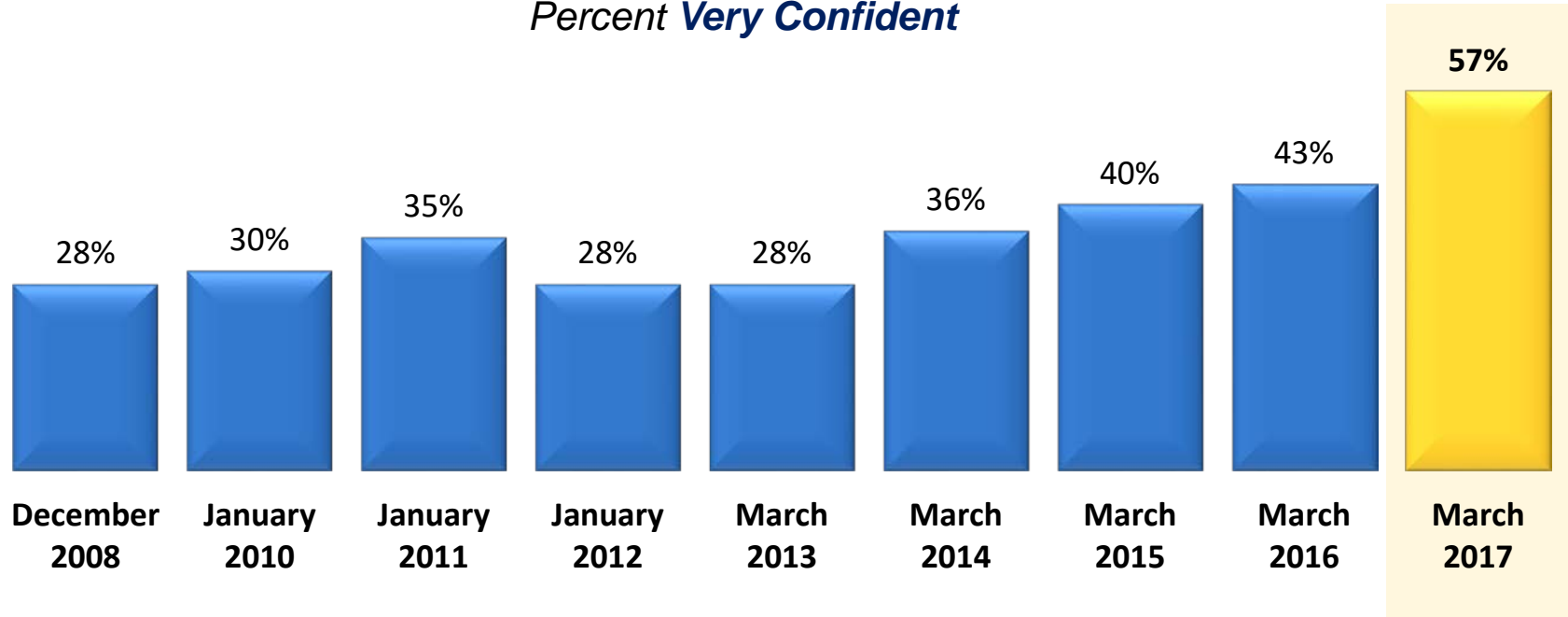


And for the first time, a majority of manufacturing executives say they are “very confident” about their companies’ financial perspectives.



“From a financial perspective, how do you feel right now about the future for your company?”

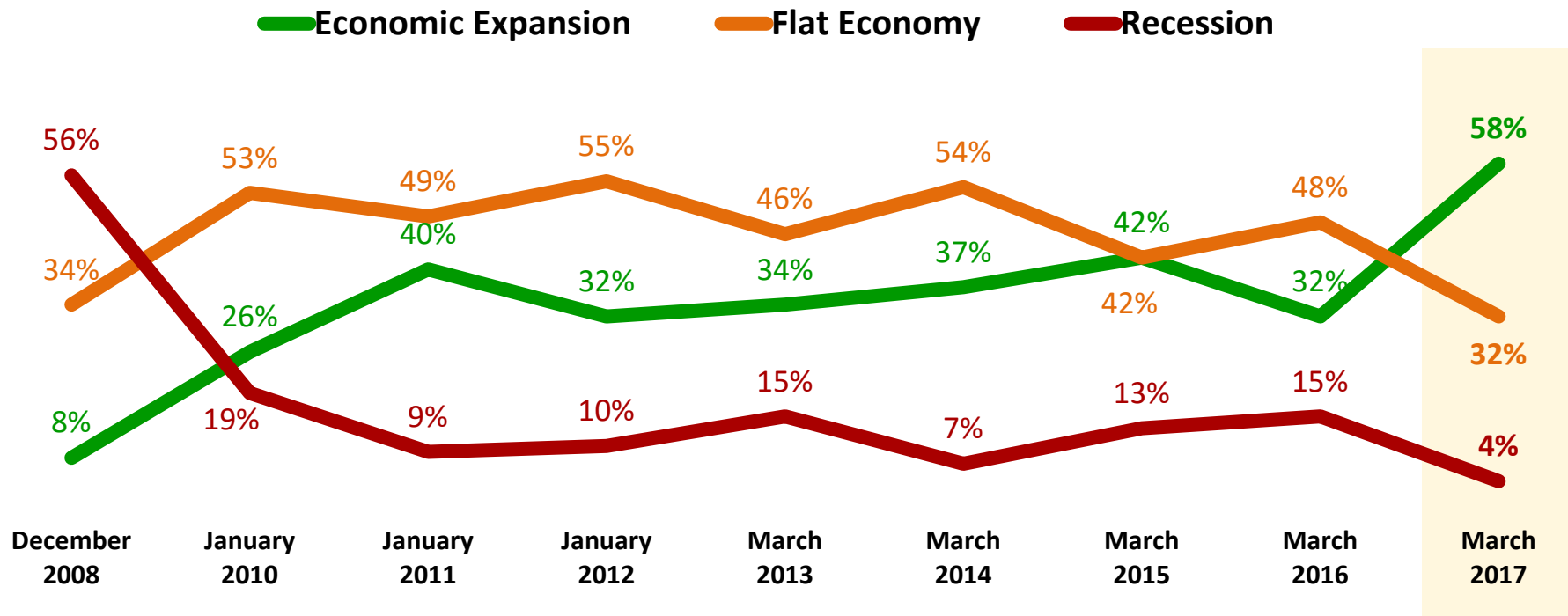
Percent **Very Confident**



Also for the first time, a majority of manufacturing executives expect an economic expansion this year.



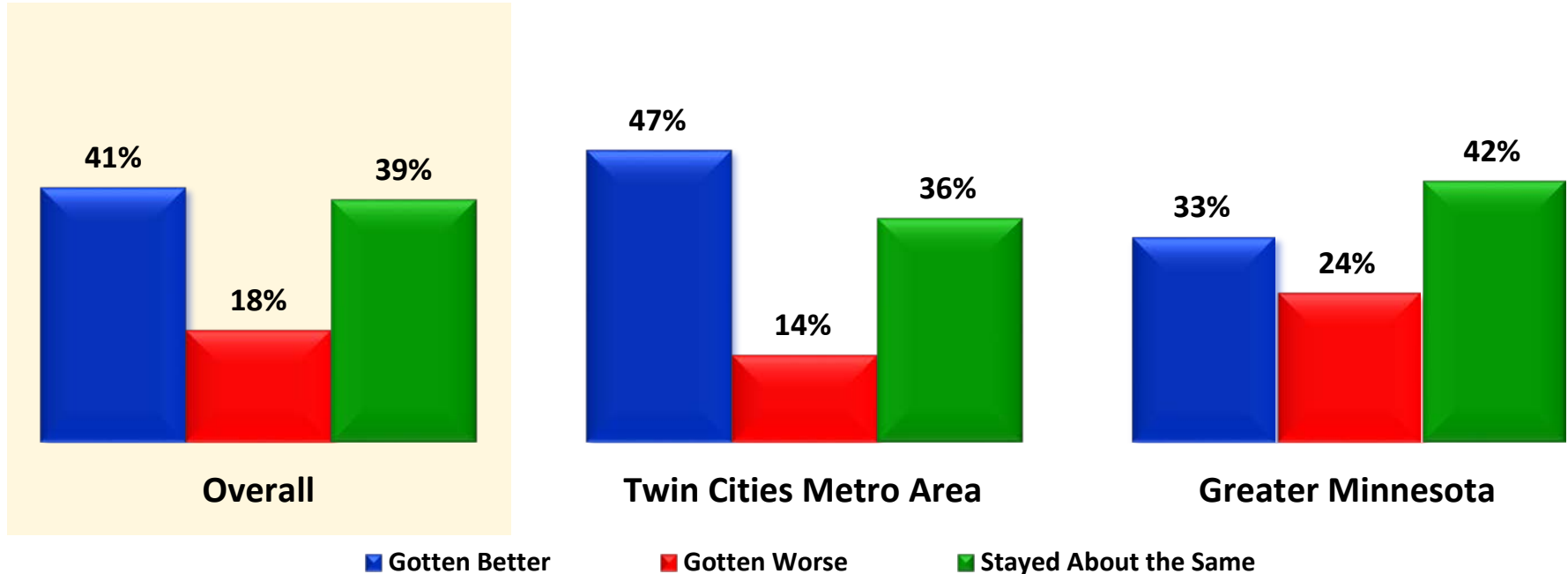
“Thinking about the upcoming year, in 2017, do you anticipate economic expansion, a flat economy, or a recession?”



These executives say the business climate in Minnesota has improved over the last five years, with execs in the Twin Cities more optimistic.



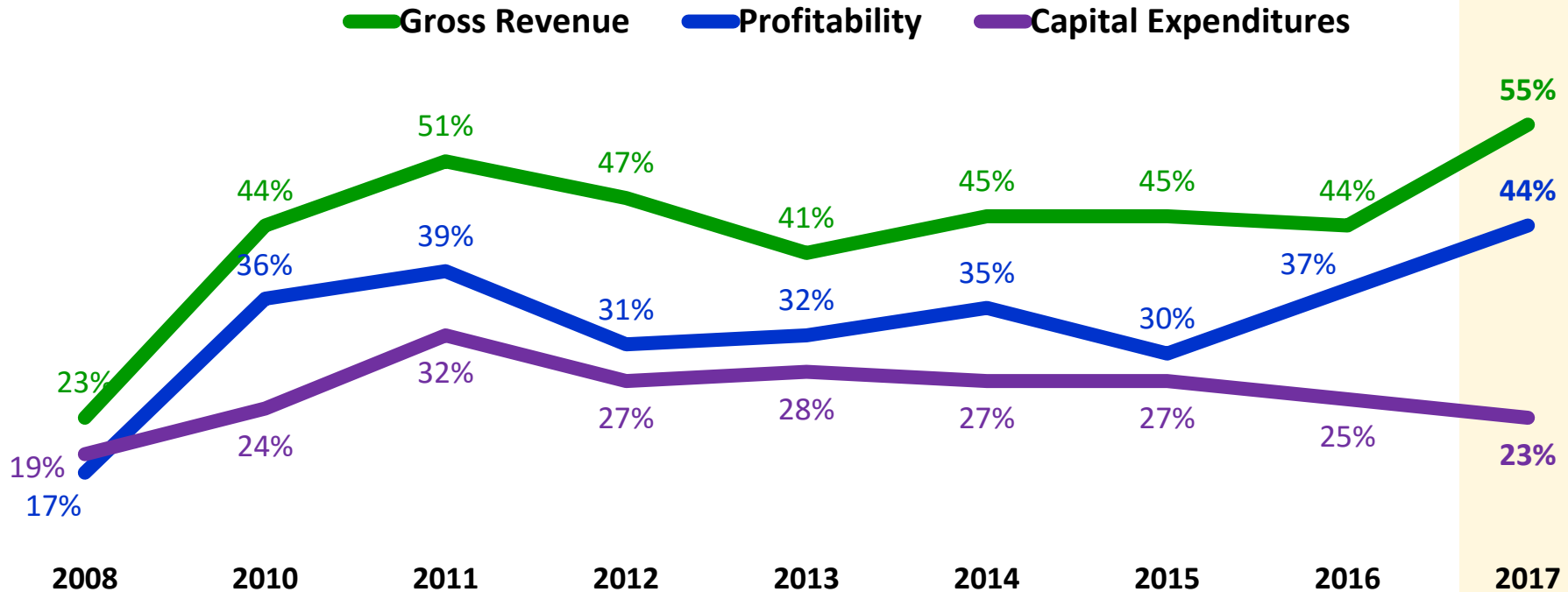
“Thinking about the business climate in Minnesota compared to say five years ago, would you say the business climate has gotten better, gotten worse, or stayed about the same?”



More than ever, these executives expect increases in gross revenue and profitability this year, though few expect increases in their capital expenditures.



Percent Expecting Increases That Year

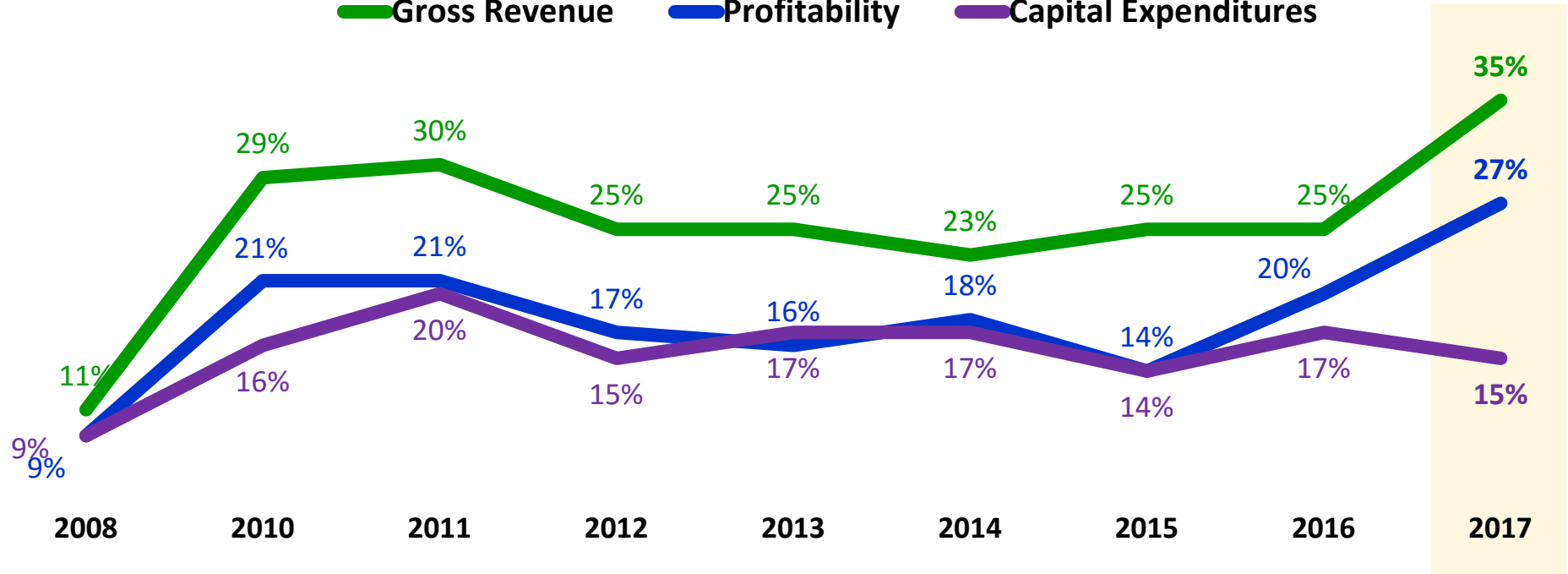


The number of executives expecting double-digit growth in revenue and profitability are at an all-time high.



*Percent Expecting **Increases More than 10%** That Year*

Gross Revenue **Profitability** **Capital Expenditures**





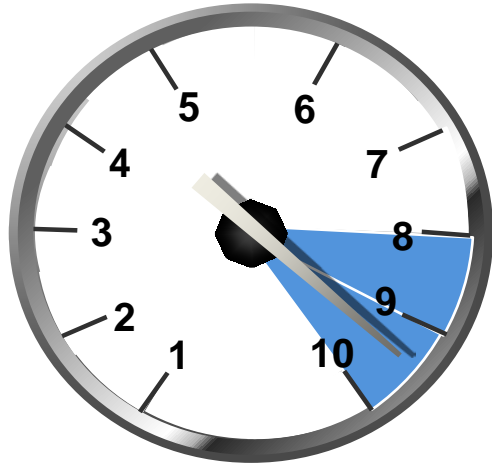
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Assessing Key Issue Areas

Key Concerns



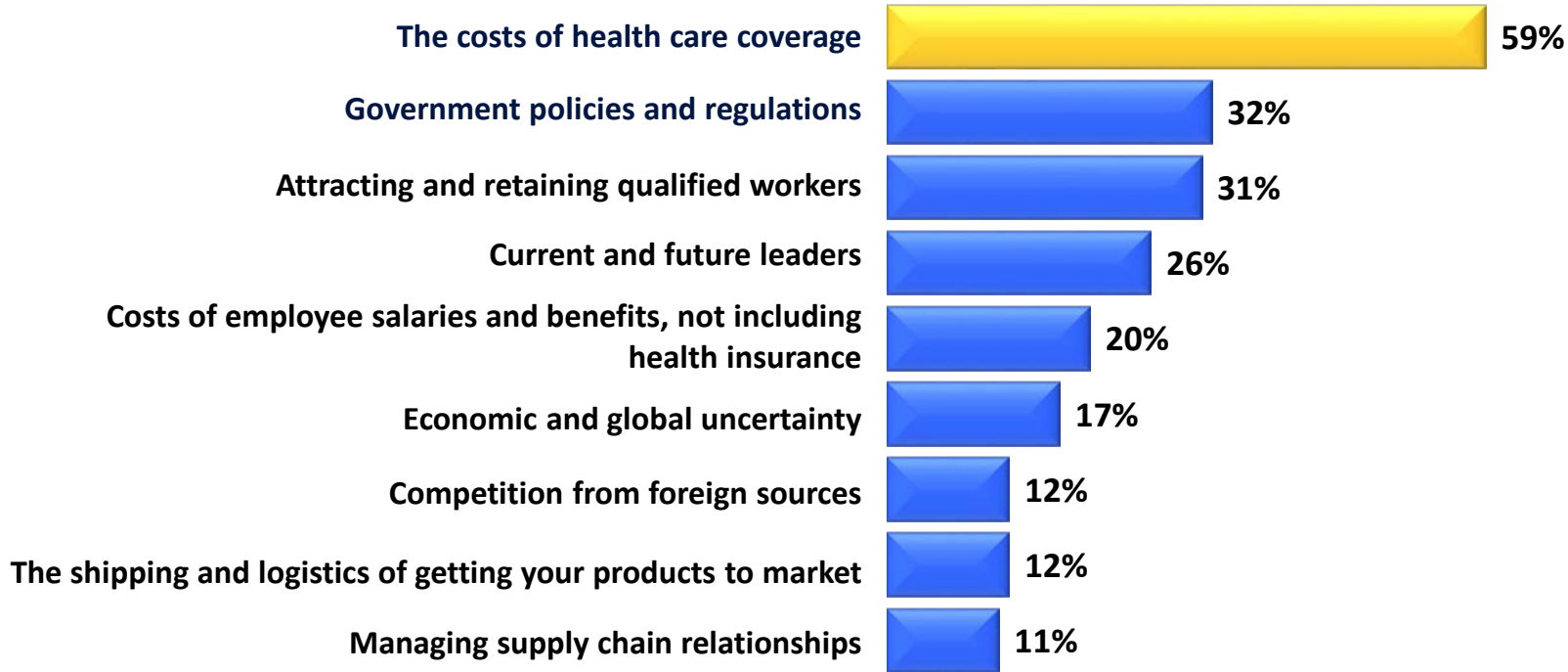
We asked manufacturing executives to rate how concerned they were about a series of factors affecting companies like theirs. In total, we had them rate 9 different factors.



“Now, I would like to read you a list of factors that some companies are concerned about. For each one, please rate how concerned your company is about that particular factor using a scale from 1 to 10, where one means that your company is NOT AT ALL CONCERNED about it and where ten means your company is VERY CONCERNED about it.”



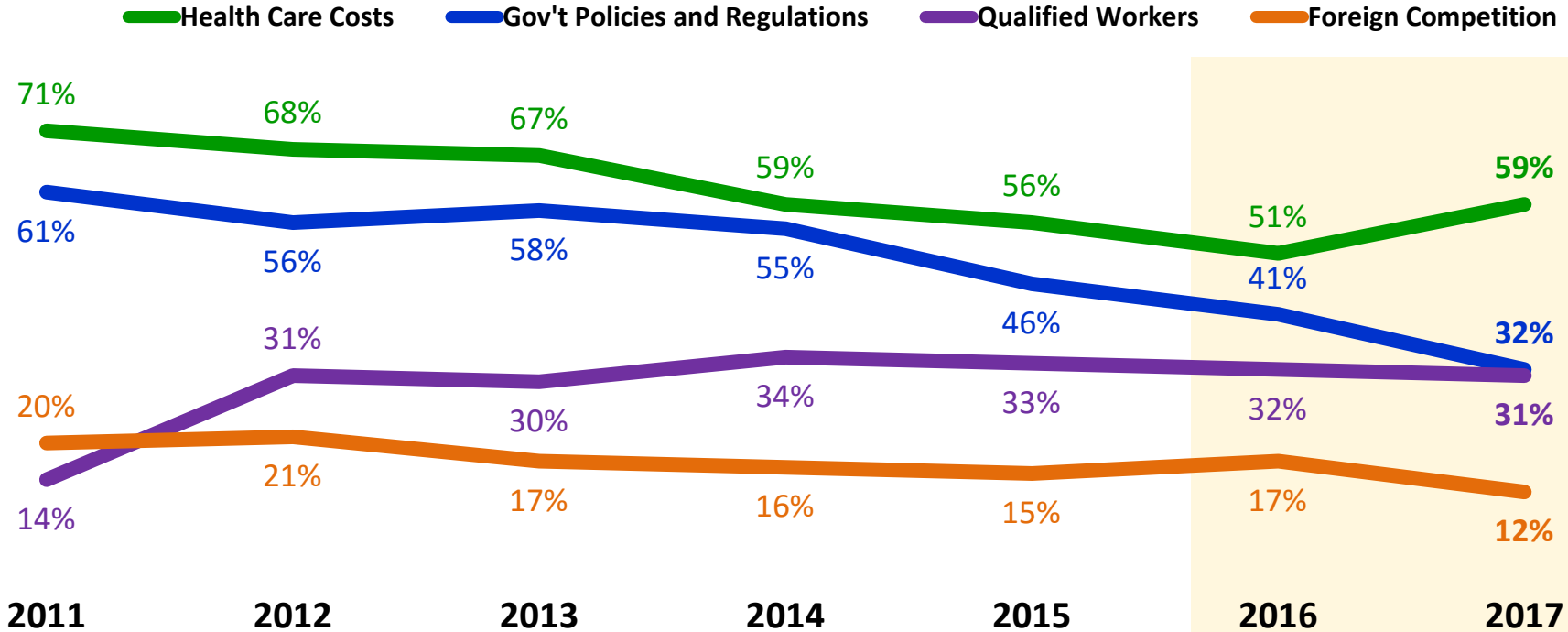
Concerns Ranked by % Concern (8-10)



While concerns about health care are growing, concerns about government regulation are softening.



Concerns Among Manufacturing Executives (% Concern 8-10)



Finding qualified workers rises in importance among the higher revenue and larger size companies.



Top Concerns Among Manufacturing Executives (% Concern 8-10)

Revenue <\$1m	Revenue \$1–5m	Revenue \$5m+	<50 Employees	51+ Employees
Health care costs (57%)	Health care costs (60%)	Health care costs (60%)	Health care costs (59%)	Health care costs (57%)
Gov't policies and regulations (30%)	Gov't policies and regulations (36%)	Qualified workers (42%)	Gov't policies and regulations (32%)	Qualified workers (41%)
Current & future leaders (26%)	Qualified workers (33%)	Gov't policies and regulations (27%)	Qualified workers (29%)	Gov't policies and regulations (36%)
Qualified workers (25%)	Current & future leaders (25%)	Current & future leaders (24%)	Current & future leaders (25%)	Current & future leaders (33%)



“What would you say are the one or two biggest challenges your company is facing that might negatively impact future growth?”

	2014	2015	2016	2017
Unfavorable business climate, such as taxes, regulations, and policy uncertainties	48%	43%	40%	38%
Rising health care and insurance costs	31%	41%	34%	36%
Attracting and retaining a qualified workforce	21%	29%	26%	34%
Weak economy and lower sales for your products	31%	23%	32%	22%
Rising costs of energy and materials for your products	29%	20%	15%	18%

Here again, the biggest challenge facing larger companies is attracting and retaining a qualified workforce.



Biggest Challenges

	Unfav. Business Climate	Rising Health Care Costs	Qualified Workforce	Weak Economy/ Sales	Costs of Energy and Materials
Less than \$1 million in revenue	36%	34%	26%	22%	23%
\$1-5 million in revenue	42%	38%	38%	23%	16%
Over \$5 million in revenue	39%	36%	56%	10%	13%
50 or fewer employees	37%	36%	31%	21%	19%
Over 50 employees	44%	36%	46%	23%	16%

Challenges in the Southwest region are different from the rest of the state.



Biggest Challenges

	IF Initiative	Northland	Northwest	South	Southwest	West Central
Unfavorable business climate, such as taxes, regulations, and policy uncertainties	37%	41%	32%	43%	17%	31%
Rising health care and insurance costs	38%	29%	26%	47%	43%	32%
Attracting and retaining a qualified workforce	35%	20%	36%	37%	57%	36%
Weak economy and lower sales for your products	28%	24%	10%	14%	19%	19%
Rising costs of energy and materials for your products	18%	15%	22%	21%	15%	17%

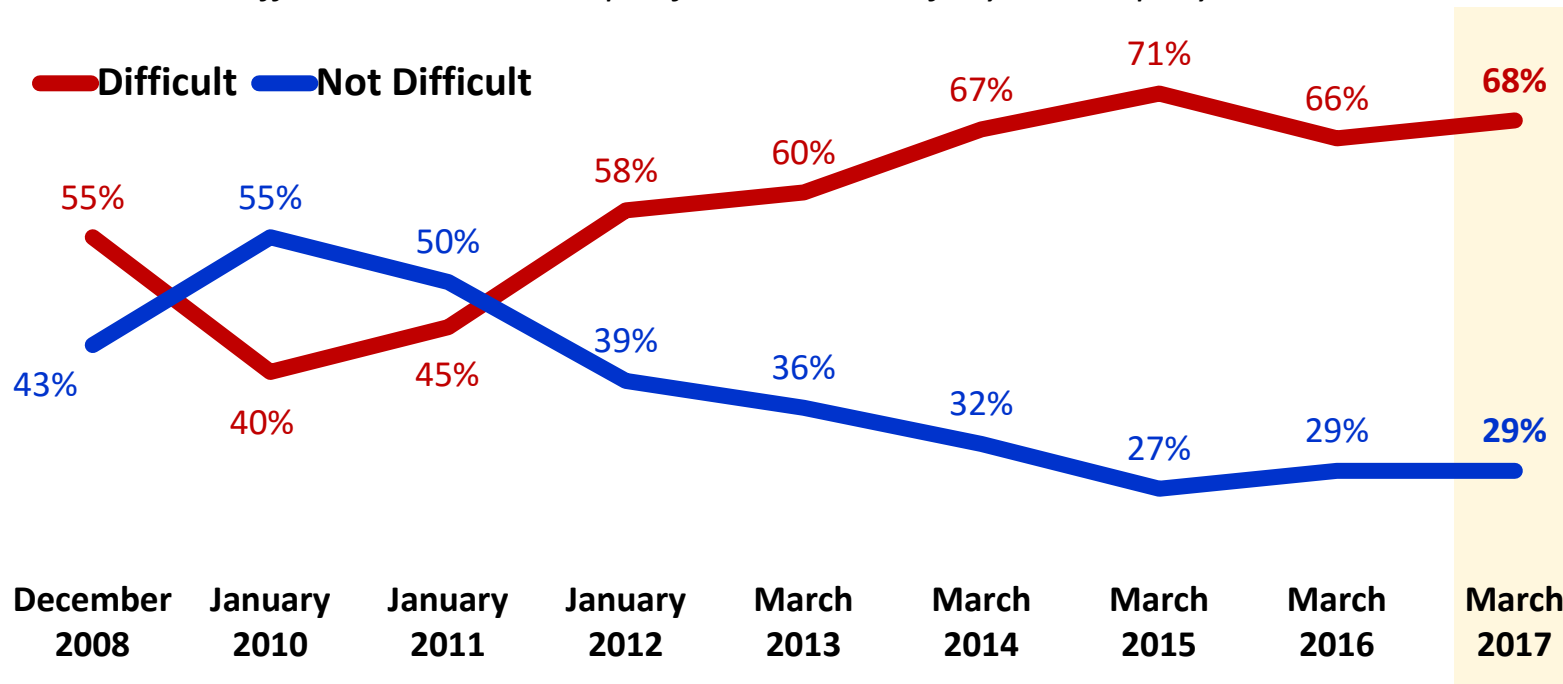


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The Workforce



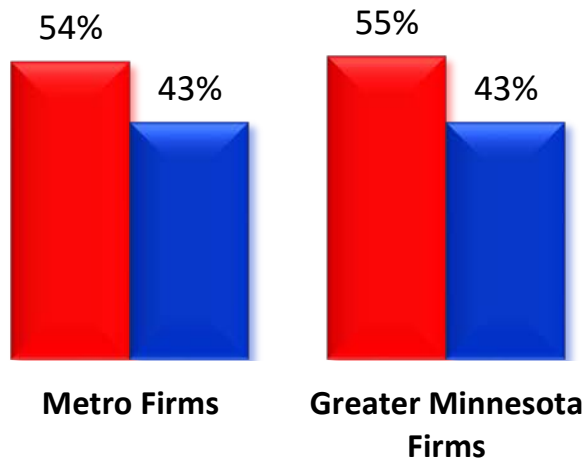
"How difficult is it to attract qualified candidates for your company's vacancies?"



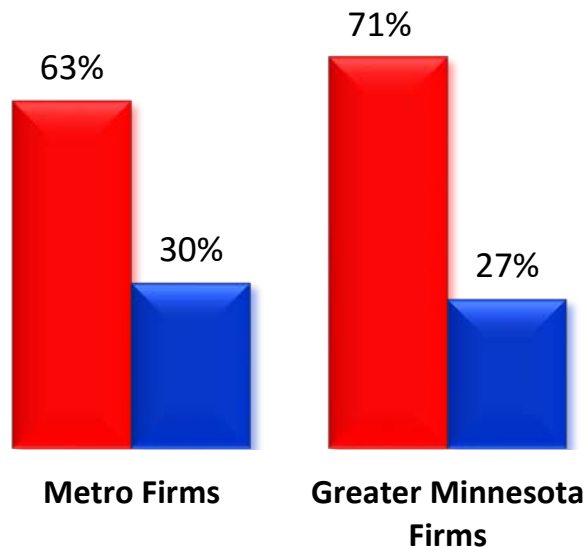


“How difficult is it to attract qualified candidates for your company’s vacancies?”

December 2008

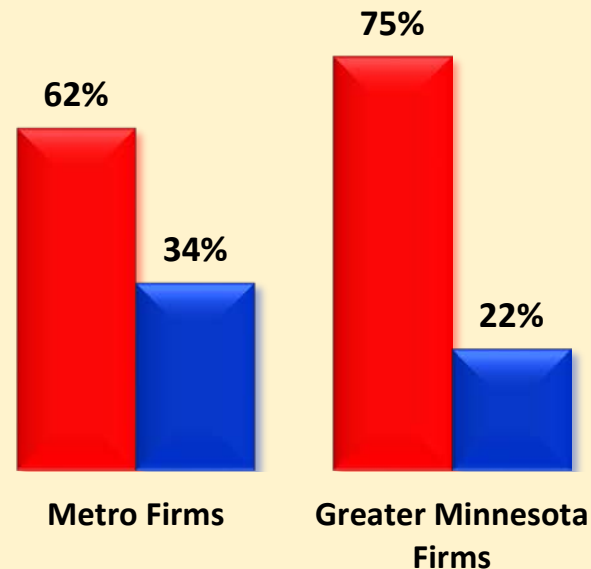


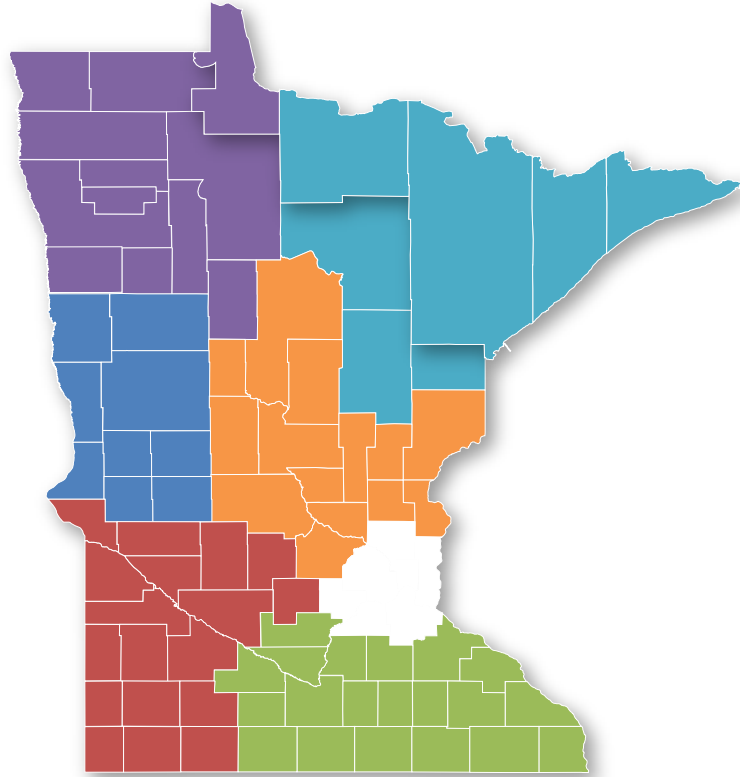
March 2016



■ Difficult ■ Not Difficult

March 2017





Northwest (N=50)	
Difficult to Attract	78%
Wages Have/Will Go Up This Year	30%

West Central (N=50)	
Difficult to Attract	73%
Wages Have/Will Go Up This Year	52%

Southwest (N=50)	
Difficult to Attract	83%
Wages Have/Will Go Up This Year	45%

Northland (N=50)	
Difficult to Attract	69%
Wages Have/Will Go Up This Year	33%

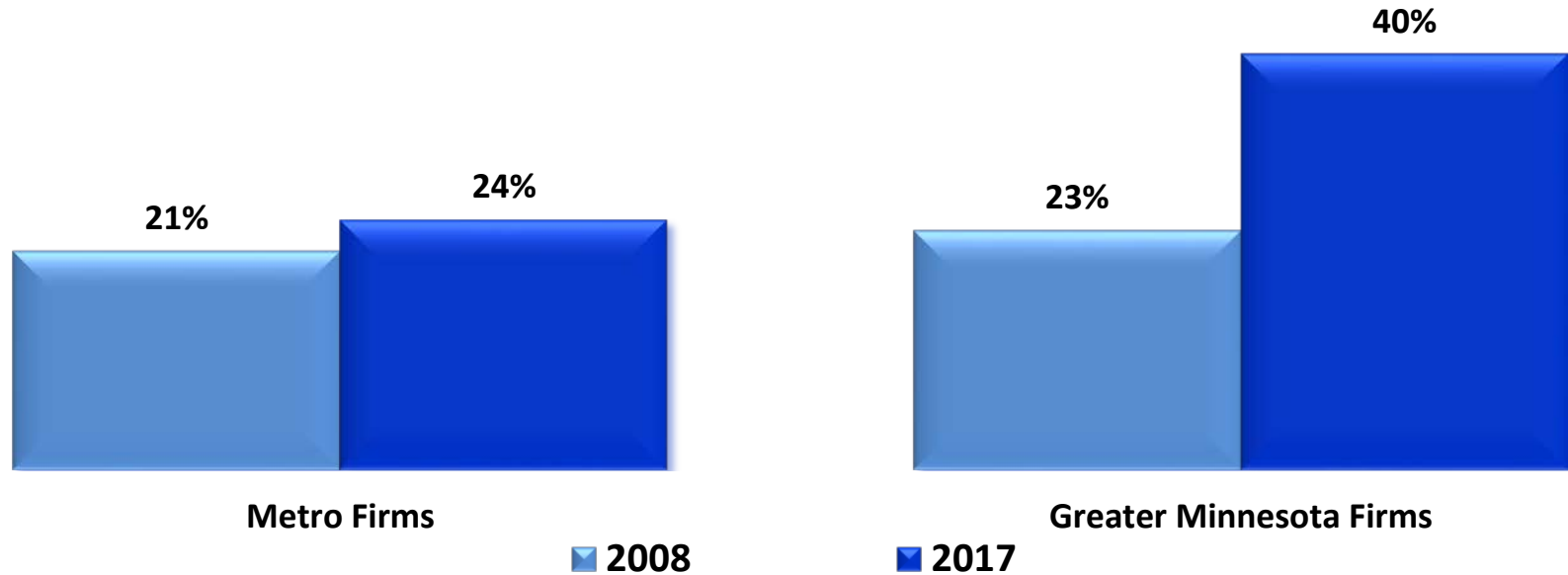
Initiative Foundation (N=54)	
Difficult to Attract	69%
Wages Have/Will Go Up This Year	56%

South (N=51)	
Difficult to Attract	80%
Wages Have/Will Go Up This Year	57%

The gap between the Twin Cities and Greater Minnesota in concern over attracting and retaining qualified workers has grown.



Concern Over the Ability to Attract and Retain Qualified Workers (% Concern 8-10)





AMONG THOSE THAT HAVE DIFFICULTY: "What would you say is the biggest challenge your company faces in attracting qualified candidates?"

	2015	2016	2017
Applicants do not have the needed skills or education	62%	52%	51%
Lack of applicants or interest	48%	42%	42%
Company too small to competitively recruit	34%	35%	37%
Inability to offer competitive wages	19%	22%	22%
Company location or geography	18%	17%	20%
Lack of child care options	n/a	n/a	8%
Something else	7%	4%	4%

Companies in Greater Minnesota report having a larger challenge with a lack of applicants and interest, and with their location.



Biggest Challenges Facing Company in Attracting Qualified Candidates by Metro Region AMONG THOSE THAT HAVE DIFFICULTY

	Twin Cities Metro Area	Greater Minnesota
Applicants do not have the needed skills or education	55%	46%
Lack of applicants or interest	39%	45%
Company too small to competitively recruit	32%	42%
Inability to offer competitive wages	25%	18%
Company location or geography	8%	34%
Lack of child care options	8%	8%
<i>Something else</i>	<i>4%</i>	<i>5%</i>

The challenges companies face in attracting qualified candidates vary by region.

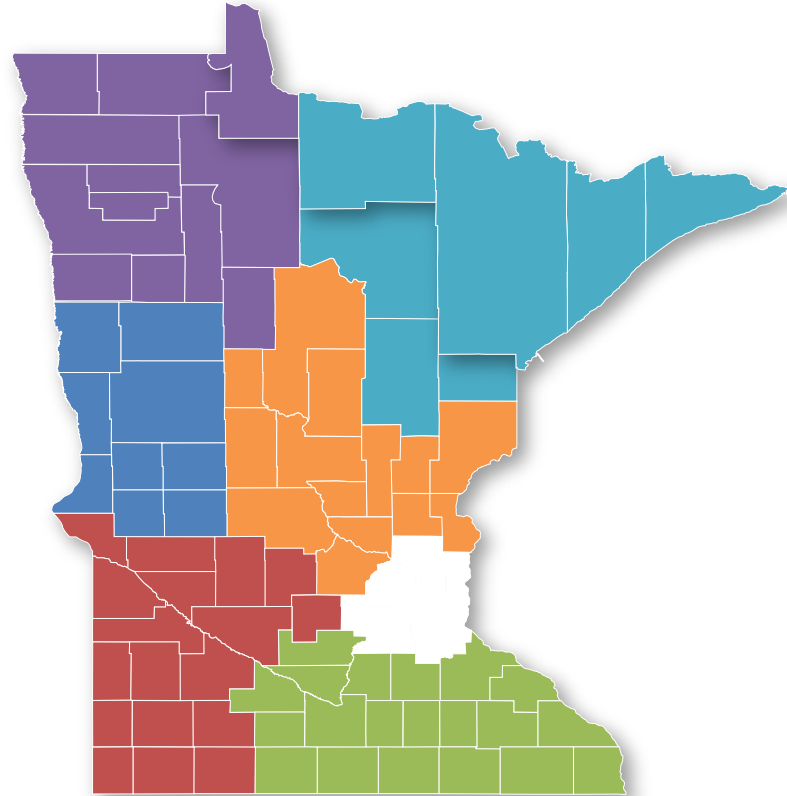


Biggest Challenges Facing Company in Attracting Qualified Candidates by Minnesota Initiative Foundation Among Those Who Have Difficulty

Northwest (N=50)	
Location/Geography	44%
Too Small to Recruit	33%
Lack of Applicants	31%
Skills/Education	20%

West Central (N=50)	
Skills/Education	42%
Lack of Applicants	39%
Too Small to Recruit	26%
Location/Geography	24%

Southwest (N=50)	
Skills/Education	45%
Location/Geography	43%
Lack of Applicants	30%
Too Small to Recruit	30%



Northland (N=50)	
Too Small to Recruit	43%
Skills/Education	40%
Location/Geography	29%
Lack of Applicants	25%

Initiative Foundation (N=54)	
Skills/Education	54%
Too Small to Recruit	51%
Lack of Applicants	49%
Location/Geography	20%

South (N=51)	
Lack of Applicants	49%
Skills/Education	45%
Too Small to Recruit	36%
Location/Geography	36%



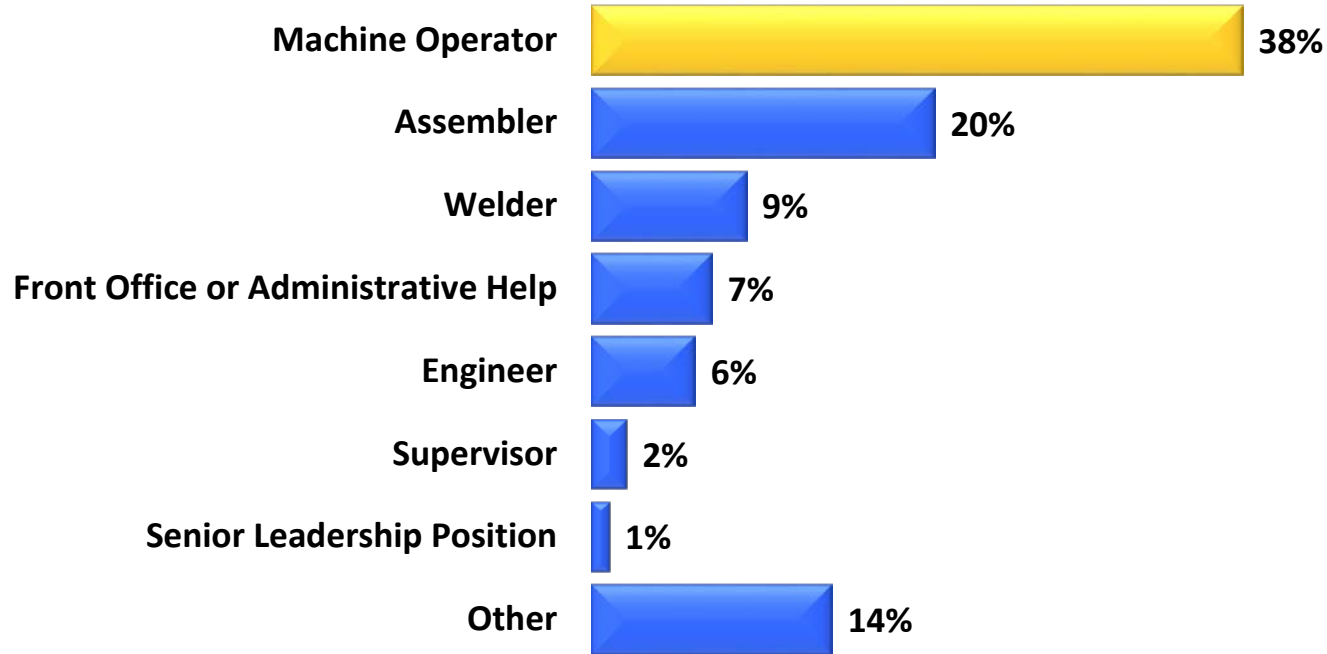
“When looking to hire new employees, where is your need greatest?”

	2013	2014	2015	2016	2017
Entry-level employees	20%	22%	25%	30%	28%
Employees with technical training	19%	21%	23%	21%	25%
Employees with technical training and experience	49%	47%	39%	38%	36%
Employees with four-year college degrees	6%	6%	6%	4%	4%

Machine operators are the most in-demand positions right now.



“What types of manufacturing jobs or positions are in most demand at your company?”





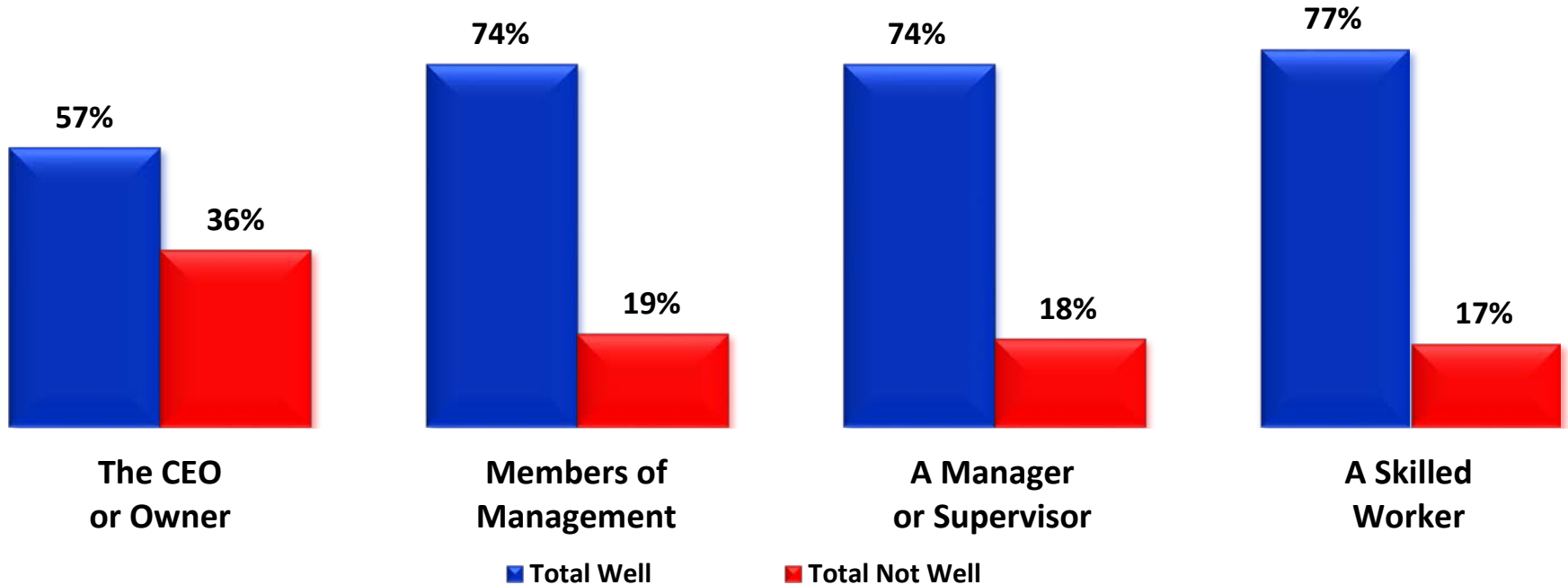
Most In-Demand Jobs

	2015	2016	2017
Machine Operator	29%	32%	38%
Assembler	23%	25%	20%
Welder	9%	9%	9%
Front office or administrative help	n/a	n/a	7%
Engineer	10%	7%	6%
Supervisor	4%	4%	2%
Senior Leadership Position	n/a	n/a	1%
Other	22%	17%	14%

Companies feel prepared to handle the departure of managers and skilled workers, but not so much the departure of a CEO or owner.

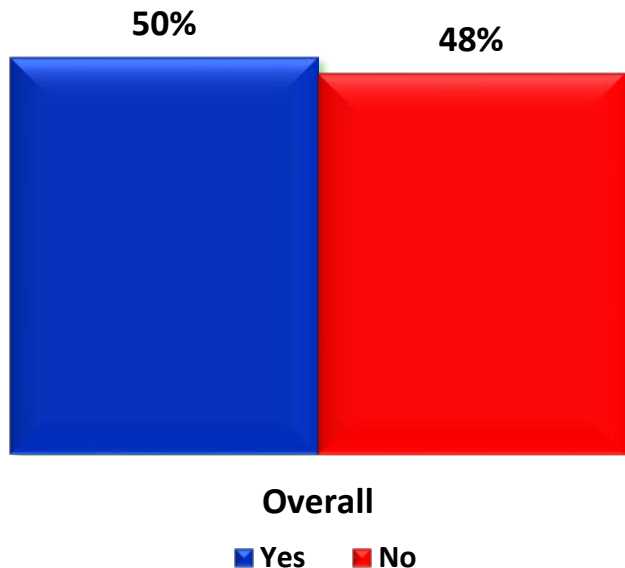


“Would you say you are very well, somewhat well, or not well prepared to handle that person’s departure?”





“On a different topic, does your company have a succession plan for when the President/Owner/CEO or top management positions retire or move on?”

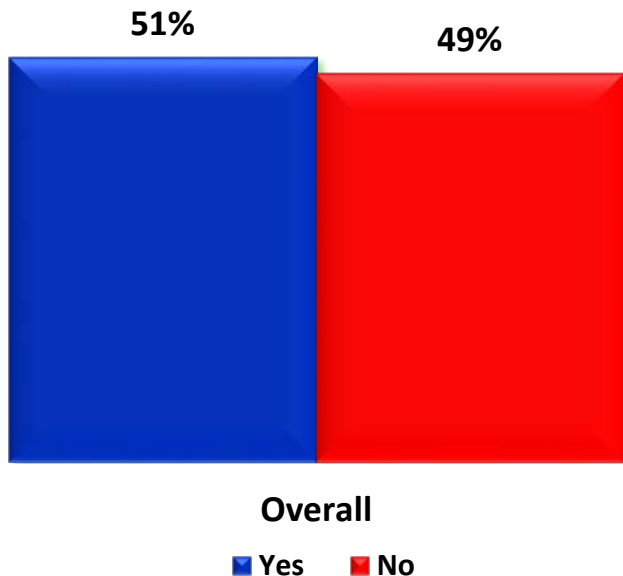


	Yes
Metro Companies	54%
Greater Minnesota Companies	45%
Less than \$1 million in revenue	34%
\$1-5 million in revenue	58%
Over \$5 million in revenue	70%
50 or fewer employees	45%
Over 50 employees	70%

About half of these executives report that their companies are using automation.



“Is your company using automation to enhance your workforce or production?”



	Yes
Metro Companies	51%
Greater Minnesota Companies	51%
Less than \$1 million in revenue	37%
\$1-5 million in revenue	55%
Over \$5 million in revenue	74%
50 or fewer employees	46%
Over 50 employees	65%

But, most do not expect automation to increase much over the next five years.



“And, in the next five years, how much do you expect automation to increase in your company?”

	Overall
Increase A Lot	14%
Some	22%
Only A Little	32%
Not Increase At All	31%

36%
A Lot/Some

Lower revenue and smaller companies are especially unlikely to expect automation to increase.



“And, in the next five years, how much do you expect automation to increase in your company?”

	Increase A Lot/Some	Increase Only A Little	Not Increase At All
Metro Companies	38%	30%	32%
Greater Minnesota Companies	34%	34%	30%
Less than \$1 million in revenue	28%	31%	41%
\$1-5 million in revenue	32%	37%	31%
Over \$5 million in revenue	56%	35%	9%
50 or fewer employees	32%	33%	34%
Over 50 employees	54%	28%	18%



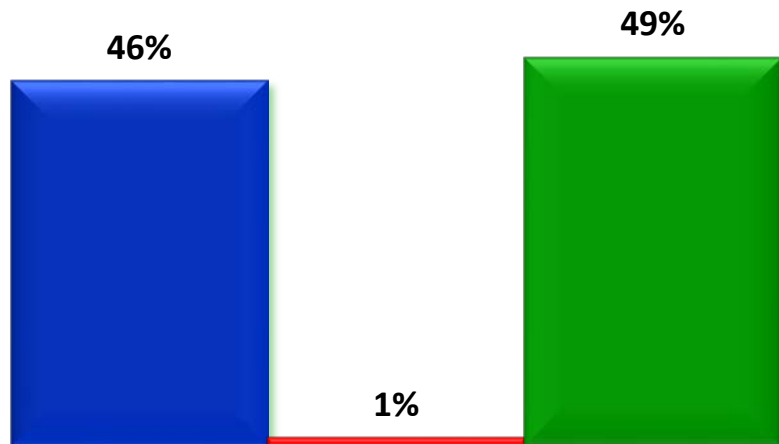
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Wages

About half of executives expect employee wages to increase this year, and of them most expect increases of under five percent.



“Have or will wages for your employees increase for 2017, or will they decrease or stay about the same?”



Overall

■ Increase ■ Decrease ■ Stay About the Same

“And, what percentage do you expect wages at your company to increase in 2017?” (Asked only among those who expect wages to increase)

	%
Under 5%	25%
5%–10%	12%
10% or more	7%

Wages at smaller companies are more likely to stay the same this year, while larger companies expect increases.



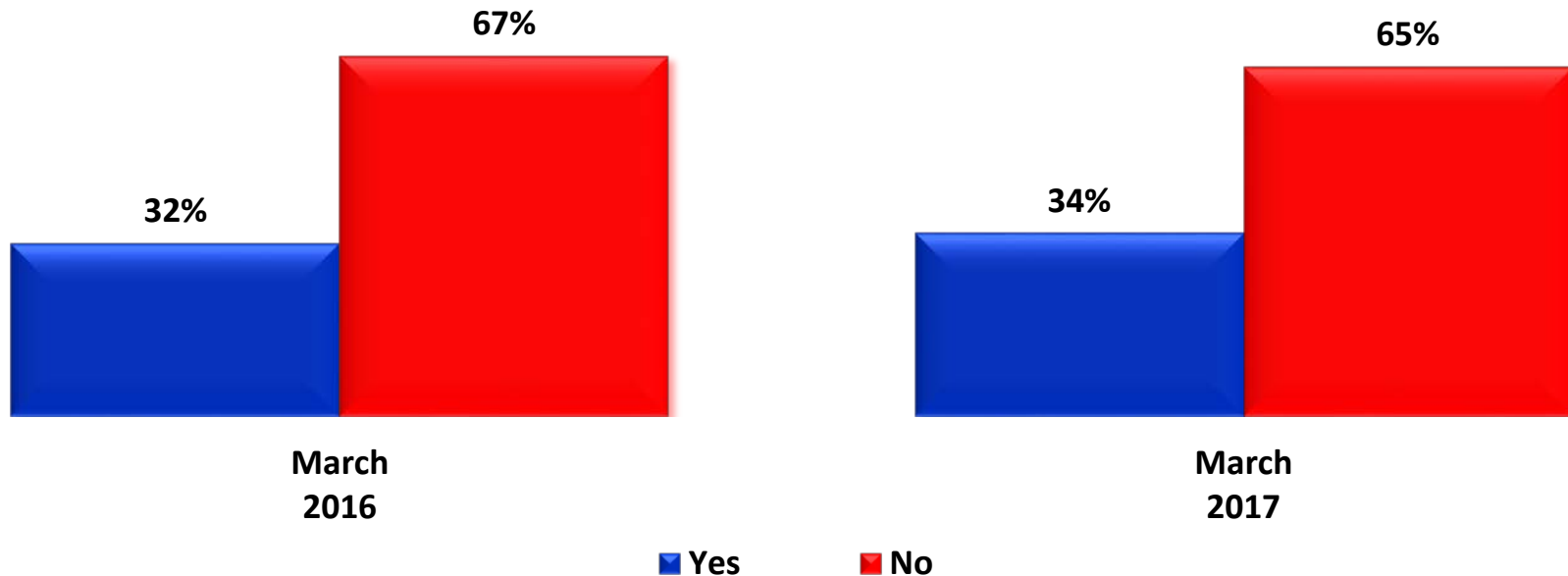
“Have or will wages for your employees increase for 2017, or will they decrease or stay about the same?”

	Increase	Decrease	Stay Same
Metro Companies	45%	1%	50%
Greater Minnesota Companies	48%	1%	48%
Less than \$1 million in revenue	31%	2%	63%
\$1-5 million in revenue	54%	0%	44%
Over \$5 million in revenue	70%	0%	29%
50 or fewer employees	41%	1%	53%
Over 50 employees	69%	0%	31%

Like last year, about one third of companies
are investing in employee development or
leadership training.



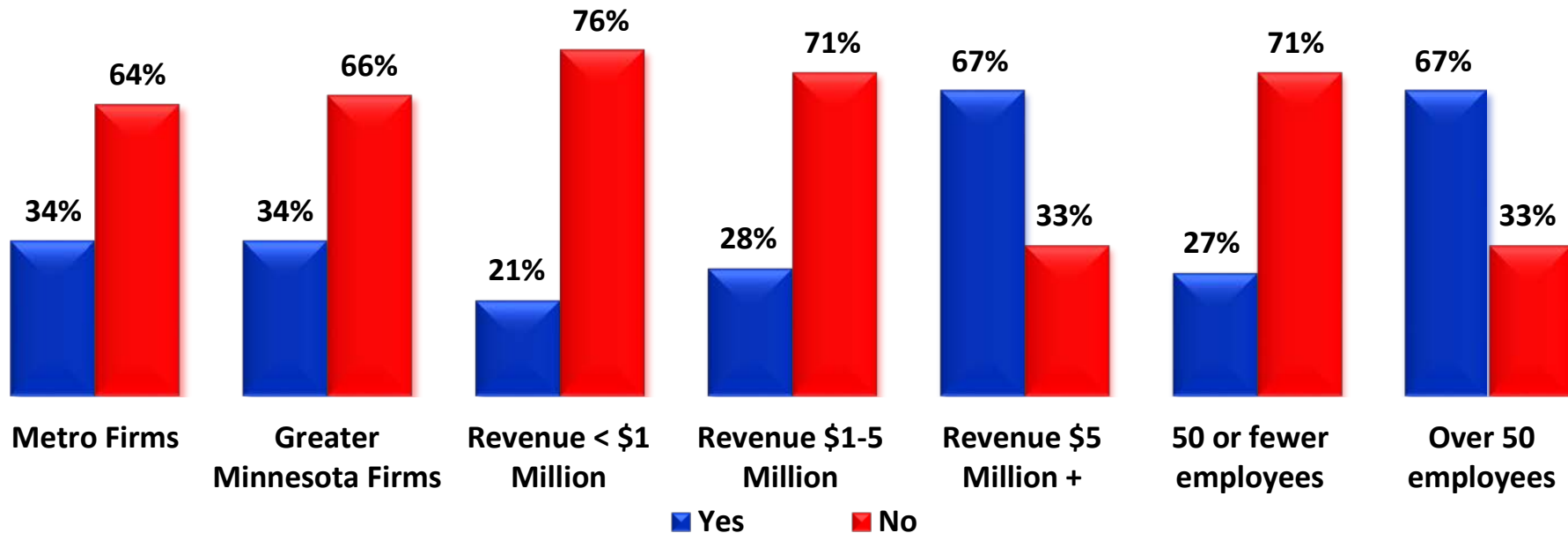
*“Are you currently investing in employee development or leadership training
in order to attract and retain qualified employees and managers?”*



Larger companies are much more likely than smaller ones to say they're investing in employee development or leadership training.



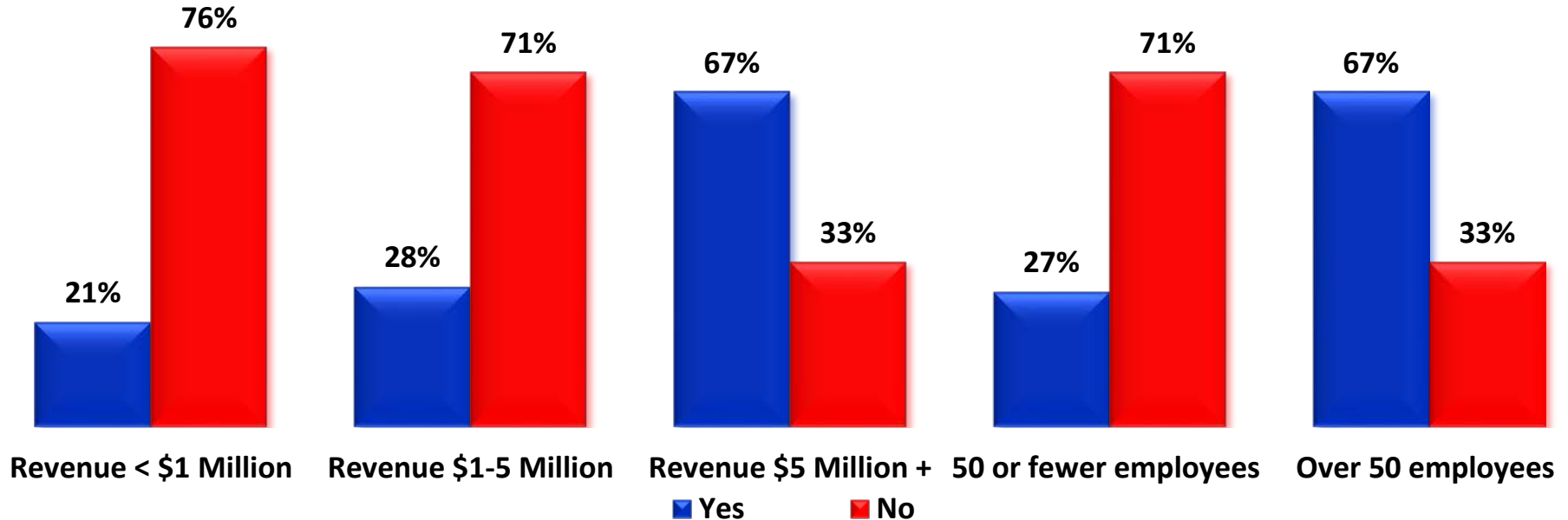
"Are you currently investing in employee development or leadership training in order to attract and retain qualified employees and managers?"



Larger companies are much more likely than smaller ones to say they're investing in employee development or leadership training.

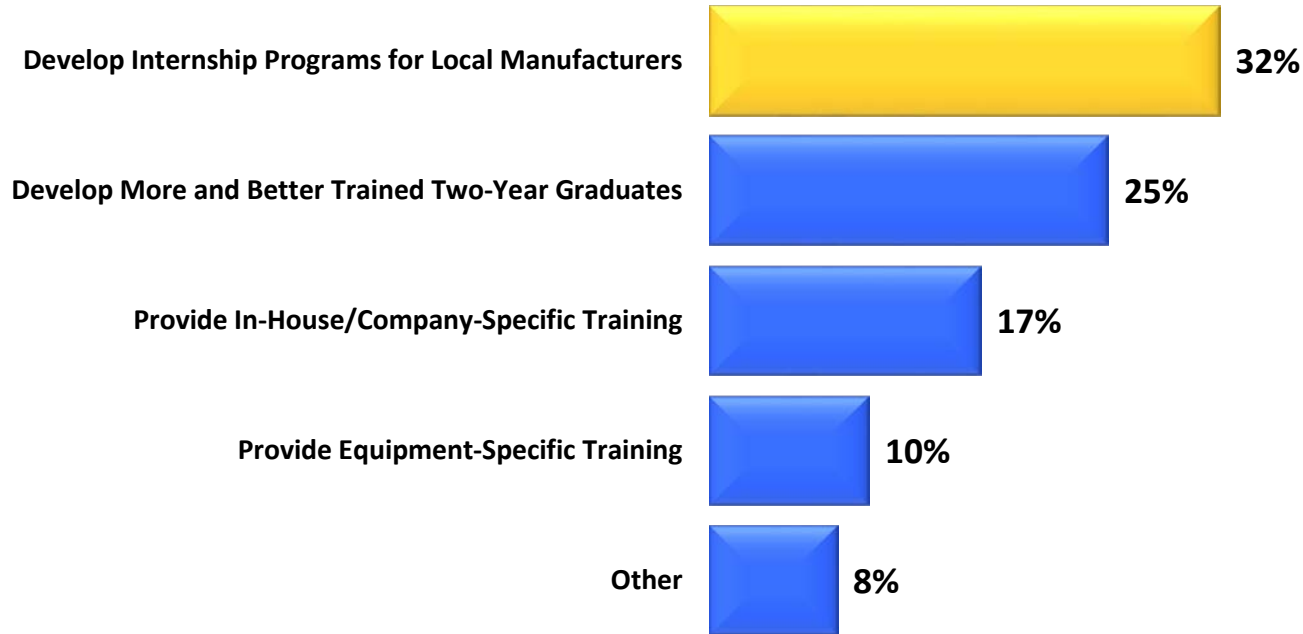


"Are you currently investing in employee development or leadership training in order to attract and retain qualified employees and managers?"





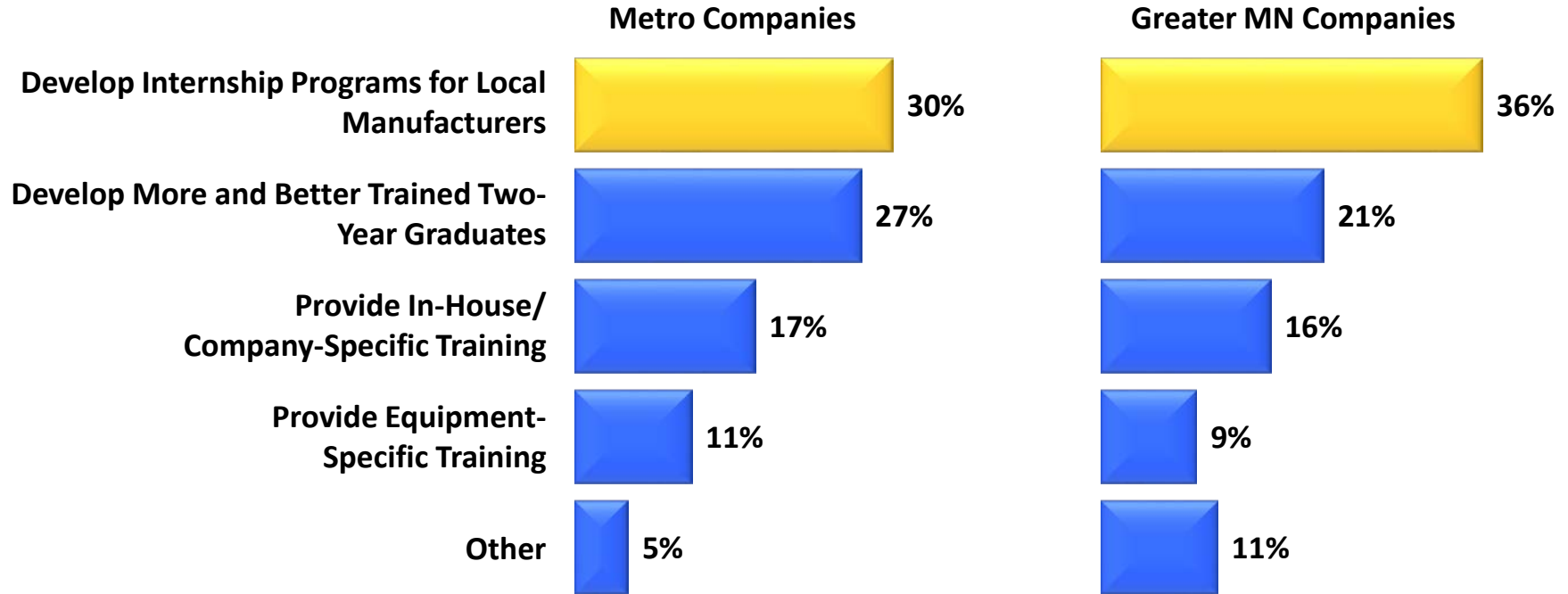
“What could local educational institutions do to help manufacturing companies like yours?”



Companies outside the Twin Cities are more interested in local educational institutions developing internship programs for local manufacturers.



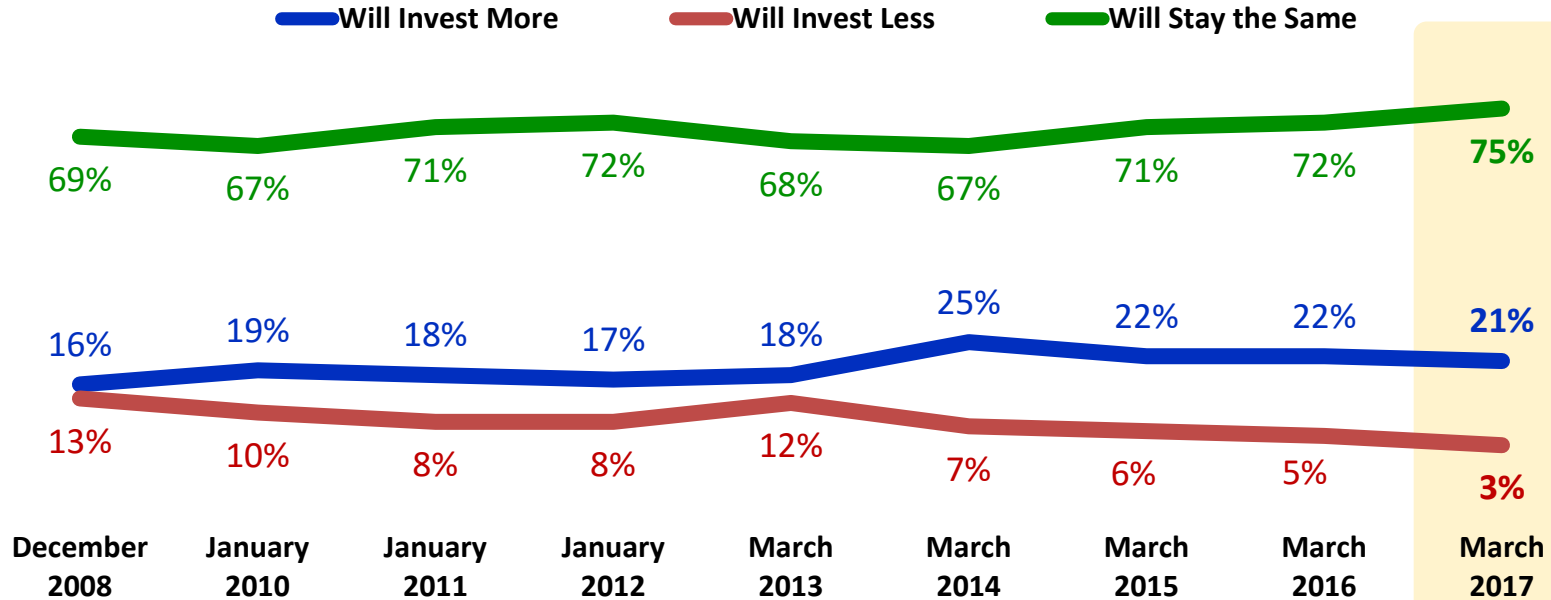
“What could local educational institutions do to help manufacturing companies like yours?”



Three fourths of companies expect to spend the same on employee development as they did last year.



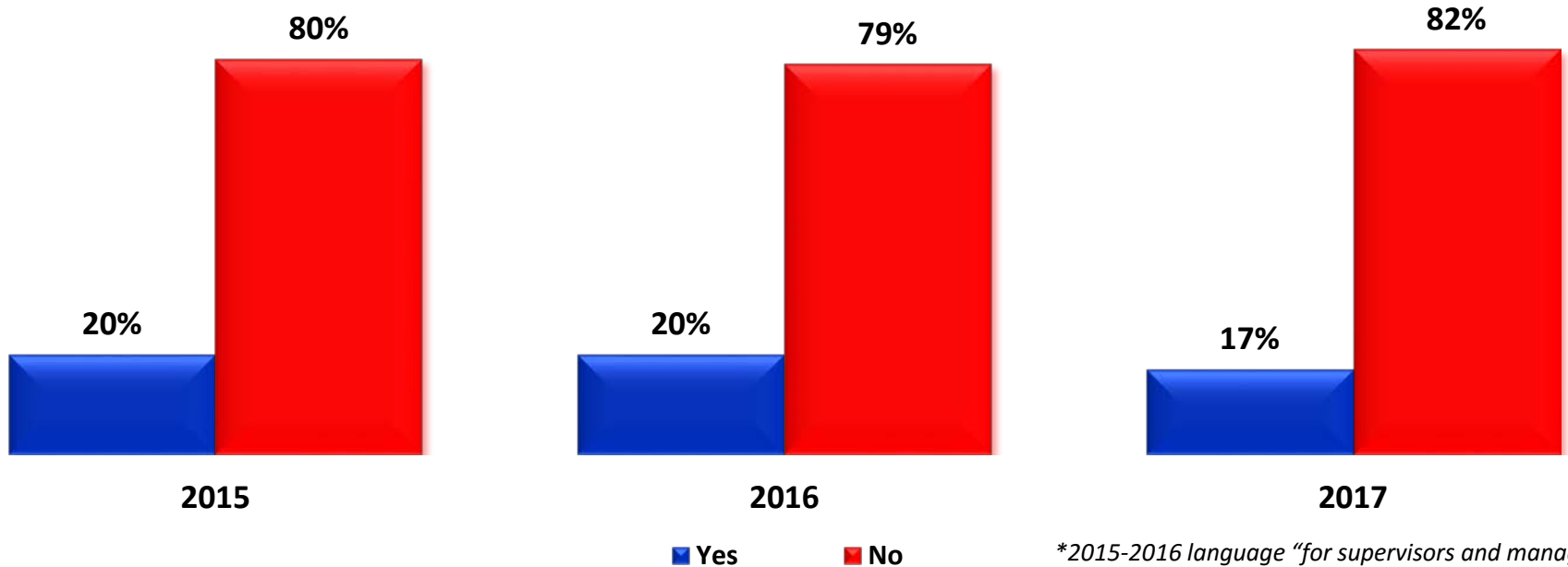
“Generally speaking, would you say that as a percentage of payroll your company will invest MORE in employee skills, talent, and leadership development or LESS next year compared to 2016, or will it stay about the same?”



The number of companies that say they have a formal structured leadership development program has remained mostly unchanged since 2015.



“Does your company have a formal structured leadership development program for employees at all levels at your company?”



The percentage of larger companies with formal structured leadership program has decreased.



Formal Structured Leadership Development Programs % Yes by Key Sub-Groups

	2015	2016	2017
Metro Firms	21%	21%	16%
Greater Minnesota Firms	17%	19%	18%
Less than \$1 million in revenue	7%	12%	9%
\$1-5 million in revenue	26%	20%	22%
Over \$5 million in revenue	32%	38%	27%
50 or fewer employees	16%	15%	14%
Over 50 employees	37%	50%	33%



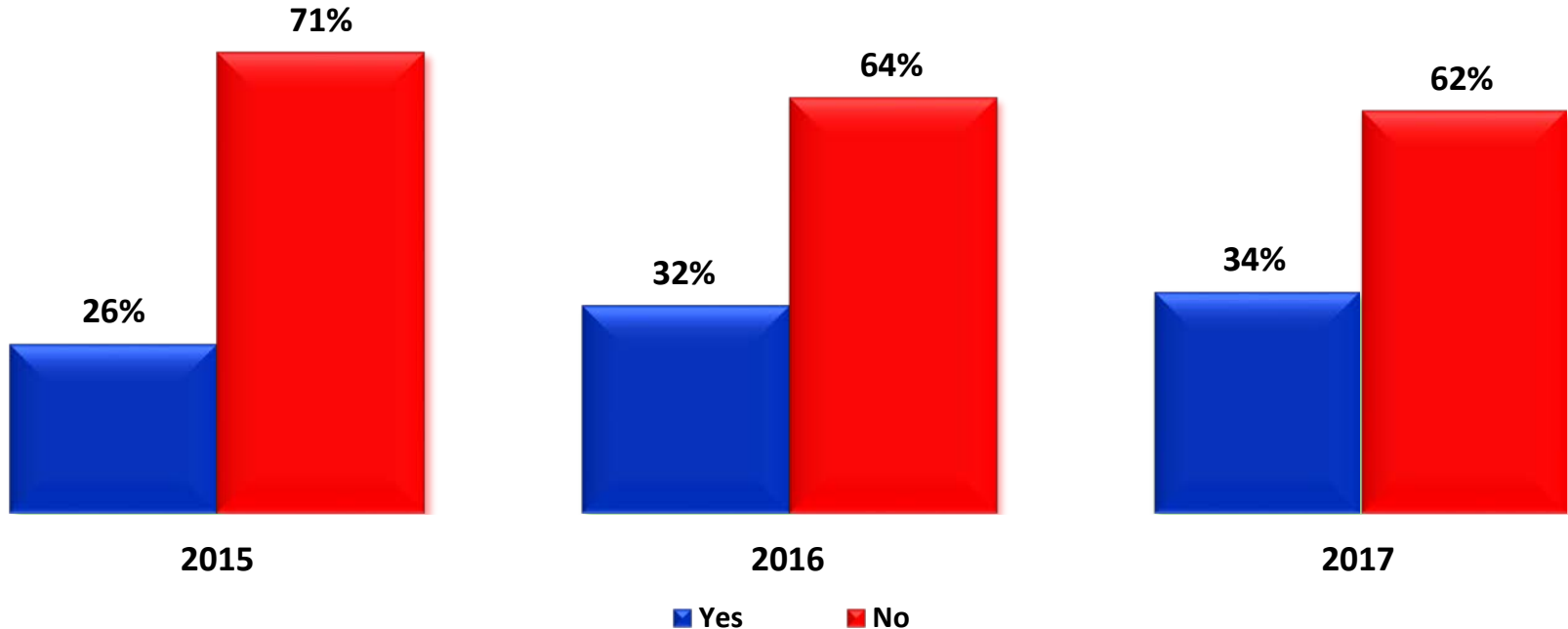
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Trade and Supply Chain Relationships

The percentage of companies that have gained new OEM business from customers wanting to have more local suppliers continues to tick up.



“Have you gained new OEM business from customers wanting to have suppliers closer to their location?”



Larger companies and companies in the Twin Cities are more likely to have experienced new OEM business.



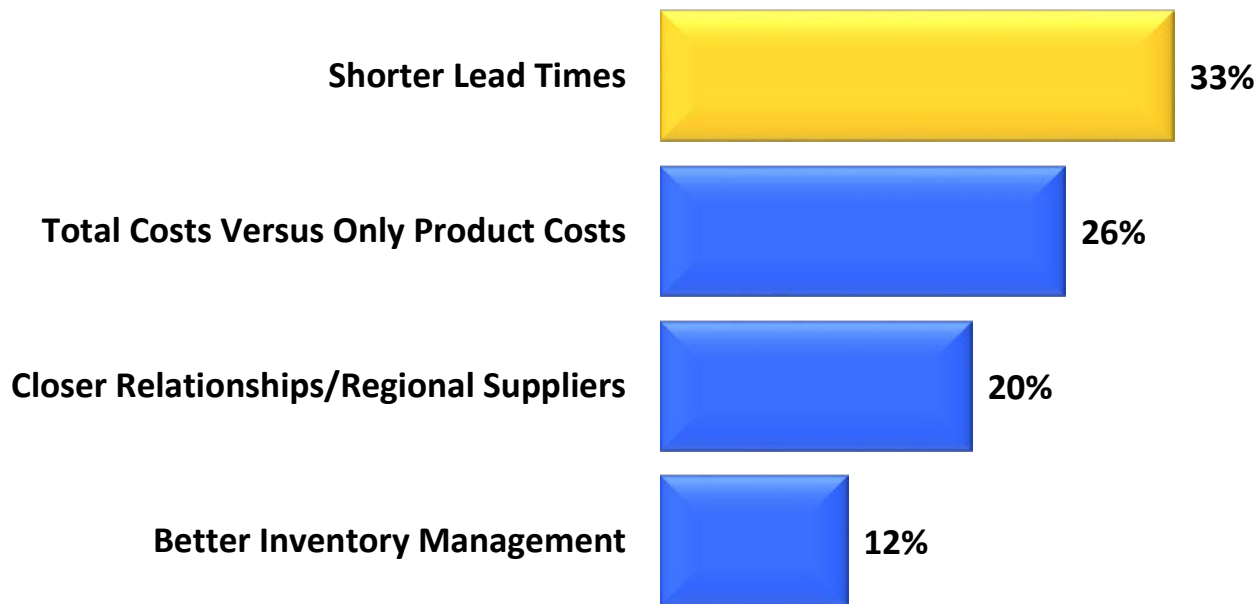
Gained New OEM Business – % Yes by Key Sub-Groups

	2015	2016	2017
Metro Area Firms	27%	32%	39%
Greater Minnesota Firms	25%	32%	28%
Less than \$1 million revenue	21%	30%	32%
\$1-5 million in revenue	28%	29%	40%
Over \$5 million revenue	31%	46%	35%
50 or fewer employees	25%	31%	32%
Over 50 employees	34%	47%	49%

The main driver of this trend continues to be shorter lead times.



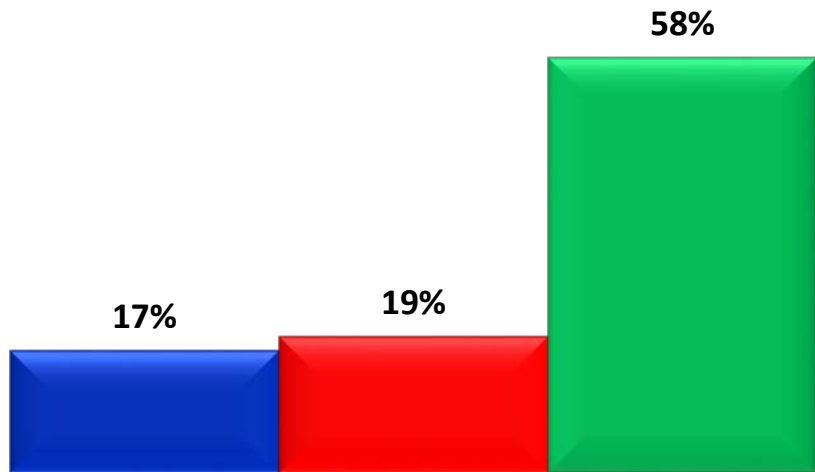
AMONG THOSE THAT GAINED NEW BUSINESS: “What would you say is the main reason why your supply chain relationships changed?”



Manufacturing executives say free trade agreements don't make much difference.



“Changing topics again, in general, do you think free trade agreements help manufacturers like your company, hurt manufacturers like your company, or not make much of a difference either way?”



March 2017

■ Help ■ Hurt ■ Make No Difference

	Help
Metro Companies	21%
Greater Minnesota Companies	11%
50 or fewer employees	15%
Over 50 employees	23%



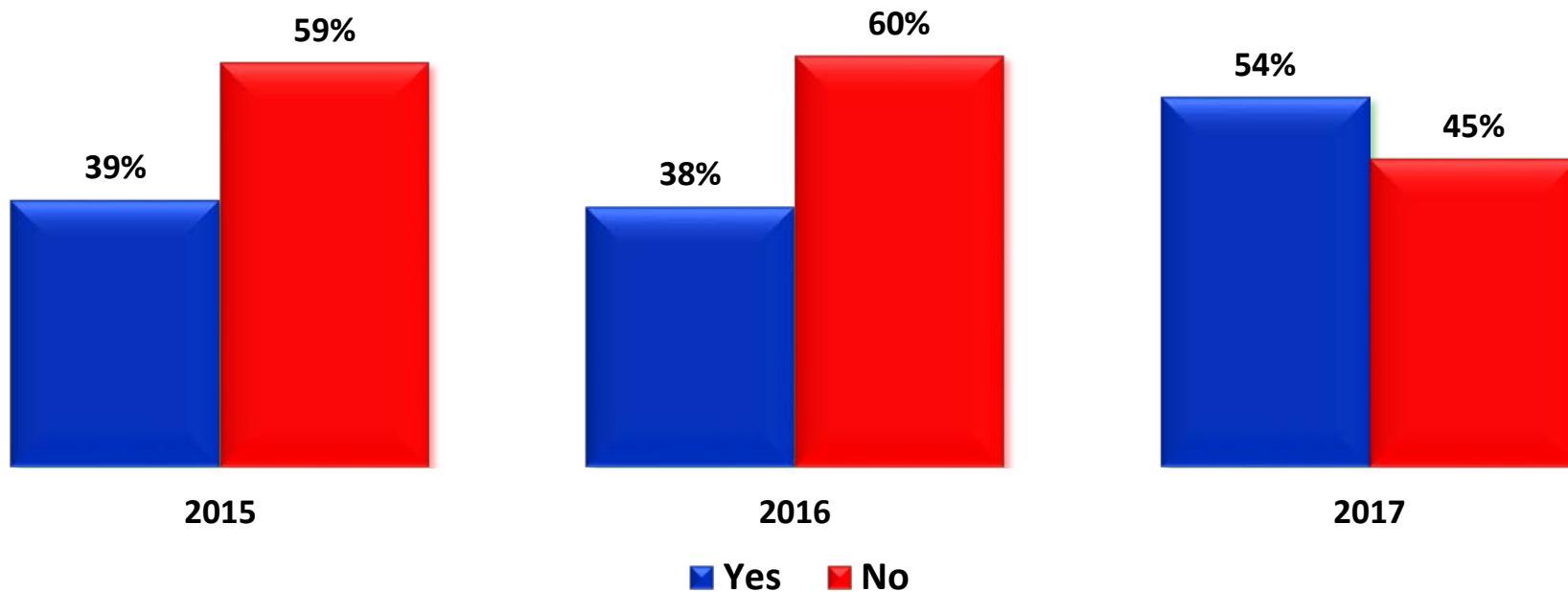
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Strategic Growth Plan

A majority of companies say they have a formal strategic plan for profitable growth.



“Does your company have a formal strategic plan for profitable growth?”



Also similar to last year, larger companies are more likely to have formal strategic growth plans.



Formal Strategic Growth Plan— % Yes by Key Sub-Groups

	2016	2017	Increase
Metro Area Companies	42%	55%	+13
Greater Minnesota Companies	34%	53%	+19
Less than \$1 million revenue	23%	40%	+17
\$1-5 million in revenue	42%	58%	+16
Over \$5 million revenue	65%	77%	+12
50 or fewer employees	35%	49%	+14
Over 50 employees	69%	77%	+8



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Final Thoughts



Lifted by their perceptions of positive conditions in the U.S. economy and their own business circumstances, **manufacturers report the highest confidence number we have registered in the history of our survey.**



Also in record numbers, **they are optimistic about the economy and their projections of revenue and profitability.** Their concerns about the global economy are at all-time lows, as is their worry about government regulations.



The cost of health care coverage is the top concern for manufacturing executives, and its resurgence may be attributed to the fact that our interview schedule coincided with highly visible attempts by the House of Representatives to kill Obamacare.



“Attracting and retaining a qualified workforce” experienced the largest bump up when manufacturers were asked to name the one or two biggest challenges that might negatively impact future growth. It is especially worrisome for higher revenue and larger size companies.



Employee wages are expected to rise for nearly half of all Minnesota manufacturers.



Only about one-third of Minnesota companies are “investing in employee development or leadership training to attract and retain qualified employees and managers.”



Manufacturers say that local educational institutions would be most helpful by developing internship programs, followed by developing and better training two-year graduates and providing in-house/company-specific training.



Thirty-four percent of companies say they have gained new business from customers wanting to have suppliers closer to their location, up from 26 percent in 2015 and 32 percent in 2016.



Companies are strategically planning for greater growth by a large margin. Fifty-four percent of manufacturers now have created strategic plans, fully 16 percent higher than 2016.



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Full results can be viewed at www.enterpriseminnesota.org

The 2017 State of Manufacturing® survey was sponsored by:

