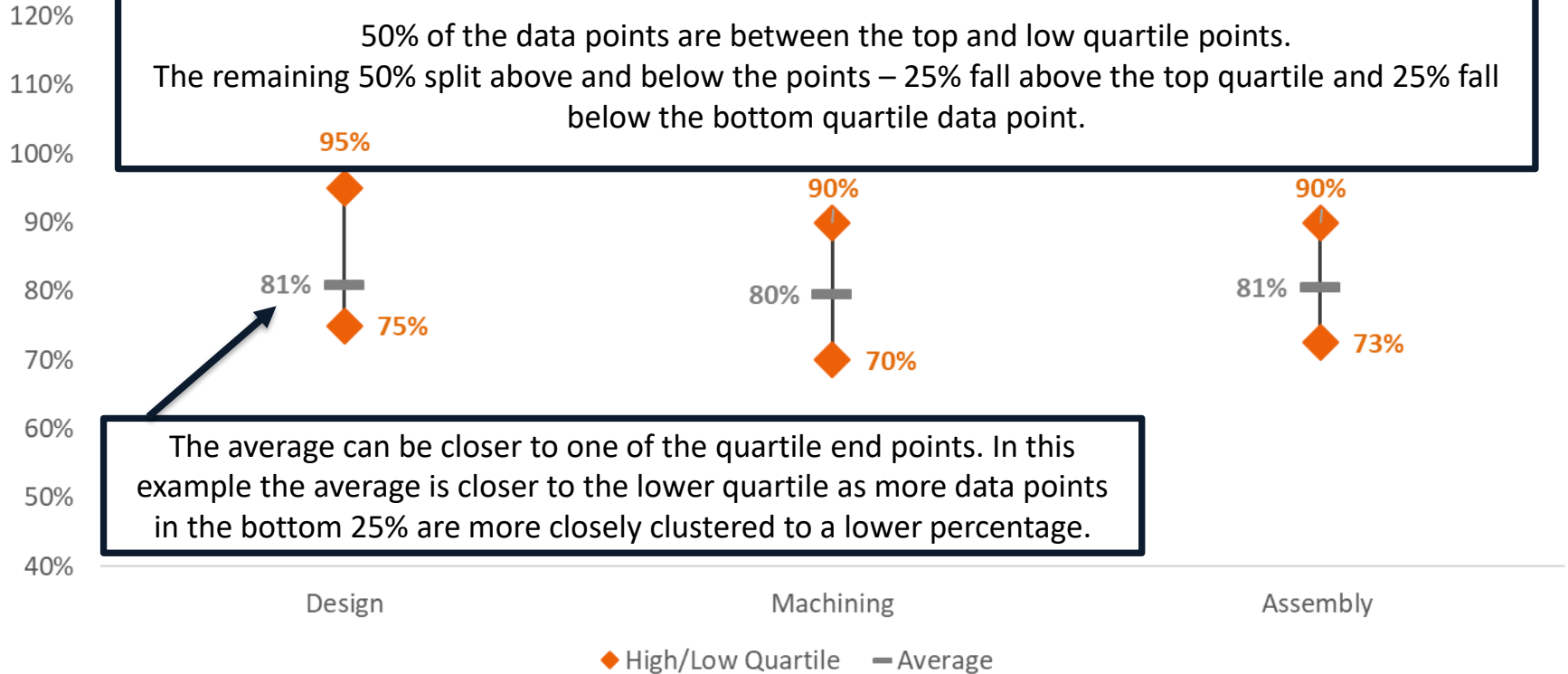




OESA Tooling Barometer
September 2018

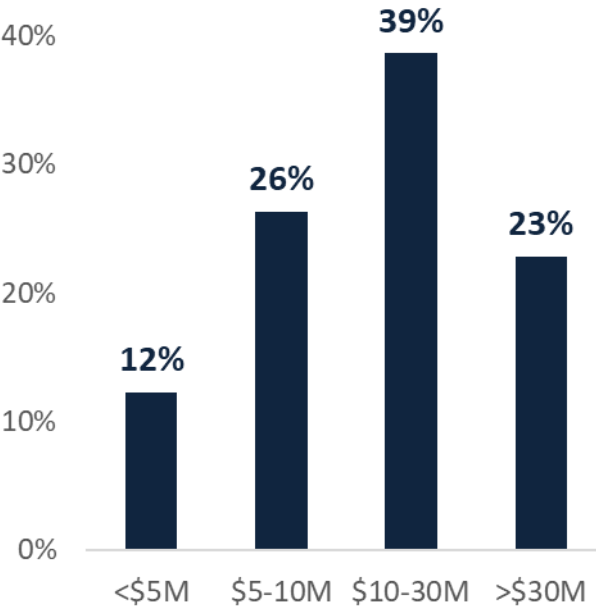
Methodology - Quartile Example

Mold Builder Capacity Utilization

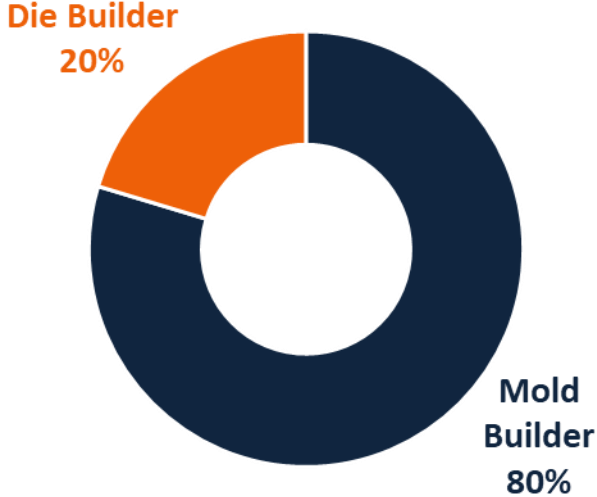


Respondent Demographics: 59 Tool Shops

Revenue Range (USD)



Shop Type

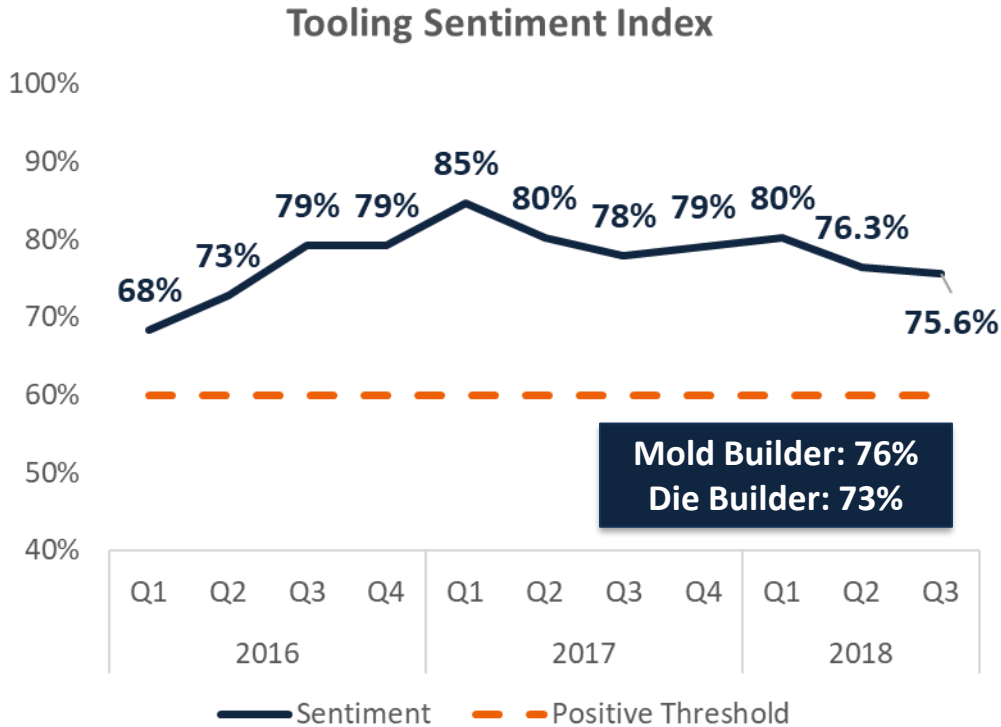


Location

Region	% of Total
United States	54%
Canada	35%
Other	11%

Question: What is your forecasted annual revenue for calendar year 2018? What is your Facility's Primary Focus? Please identify your company's geographic location.

Sentiment Has Decreased by Almost A Point

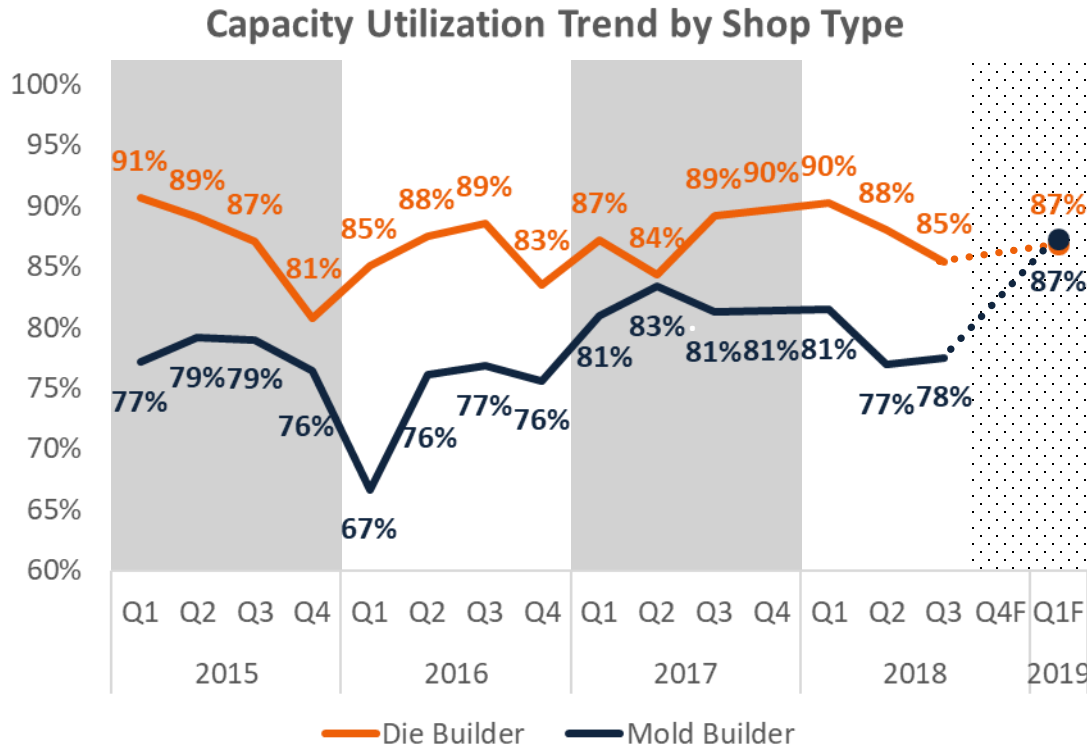


The third quarter saw a .7 point decrease in overall sentiment.

Sentiment	% of Respondents	% Change from Q2 2018
Very Pessimistic	2%	+1%
Pessimistic	2%	-1%
Neutral	28%	+6%
Optimistic	49%	-5%
Very Optimistic	19%	-1%

Question: Over the next three months, what is the general outlook for your facility? Shop Type: Mold and Die Builders

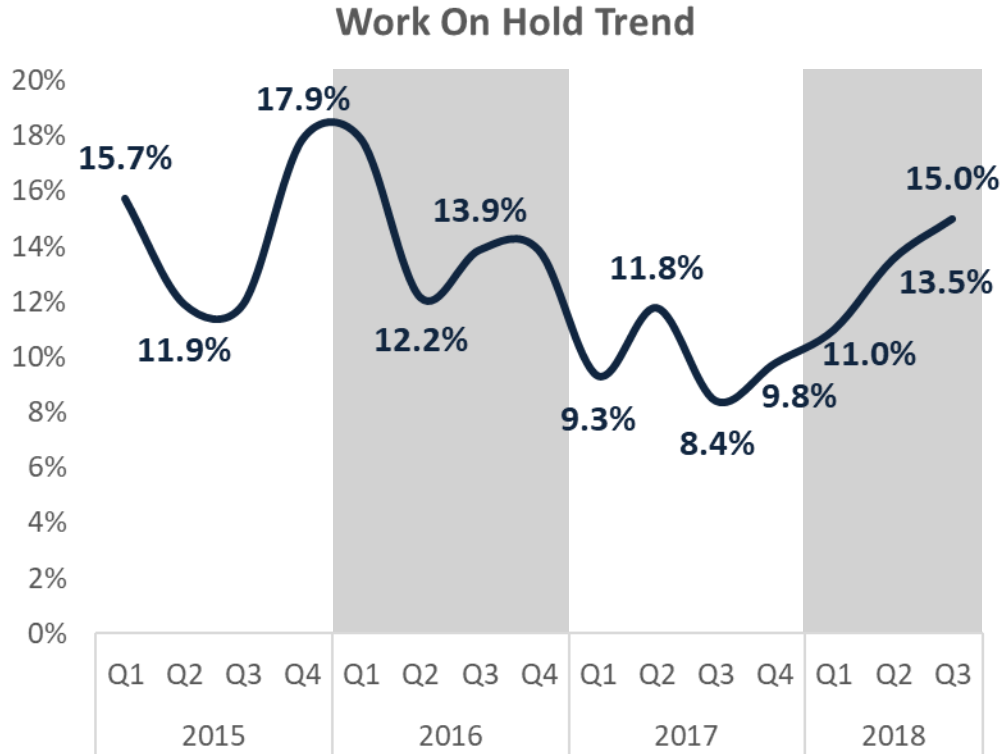
Capacity Utilization Down Significantly



- The first half of 2018 was slower than expected.
- Quoting is up in the back half of the year and HRI expects many new programs to kick off in late 2018.

Question: What is your facility's current overall capacity utilization? What is your facility's expected 2018 overall capacity utilization? Shop Type: Mold and Die Builders

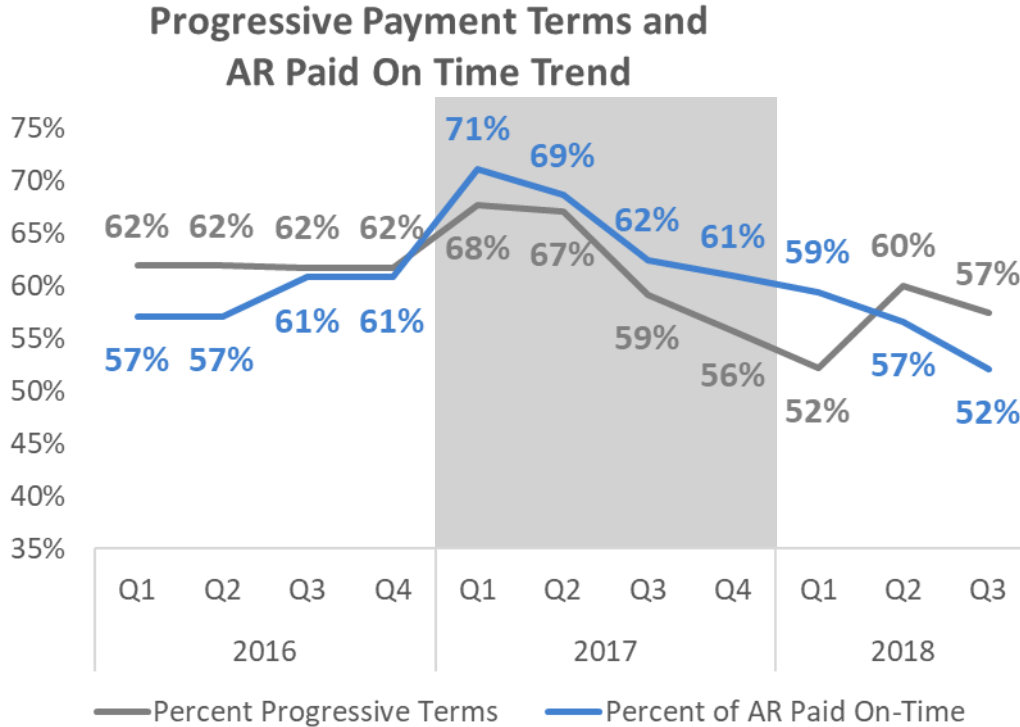
Work On Hold Spikes 1.5 Points



- Work on hold has increased with the slow down in 2018, however, still below the peak witnessed in the first quarter of 2016.
- GM T1X SUVs are a big contributor to the slow down.
- Automotive programs are expected to resume in the last 4 months of 2018.

Question: What percentage of jobs have you been awarded are currently on hold due to reasons outside of your control? Shop Type: Mold and Die Builders

AR Paid On-Time Hits An All Time Low



- Progressive payment terms and A/R paid on time continue to trend in the wrong direction as supply out ways demand.
- Progressive payments continue to be available but not for all shops and not consistently from OEMs or Tier 1s.
- Shops continue to be strained chasing payments on programs making cash availability a challenge particularly when they are also not receiving as favorable payment terms.

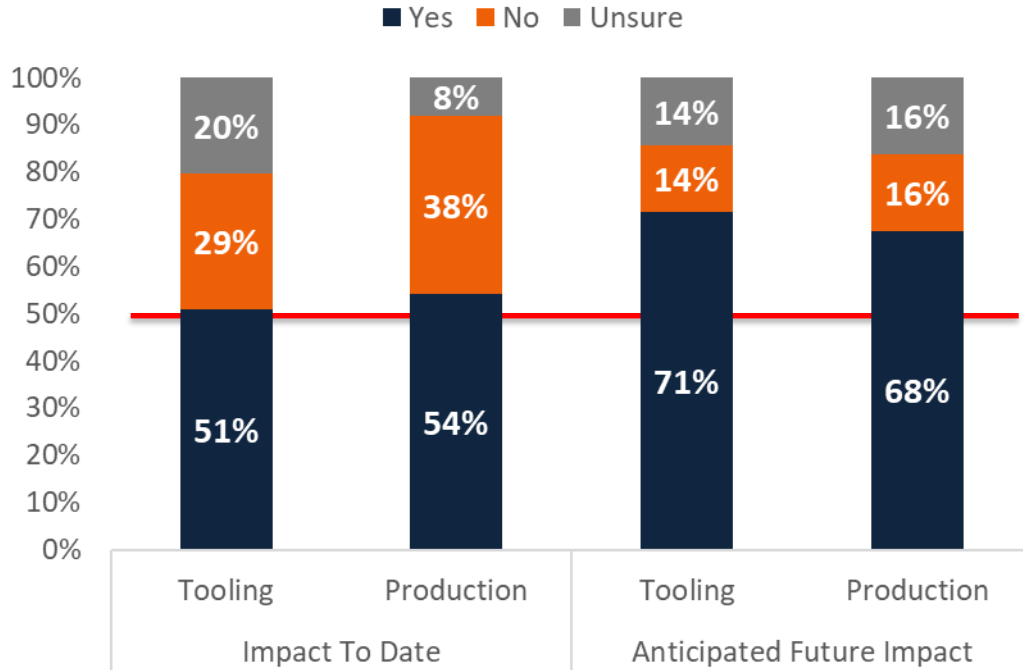
Question: Over the past three months, approximately what percent of your new booked business includes progressive payment terms and accounts receivables were being paid within contract terms. Shop Type: Mold and Die Shops

OESA Tooling Barometer - September 2018

Q3 THEME: TARIFF IMPACT

Tariff Impact on the Supply Chain

Tariff Financial Impact

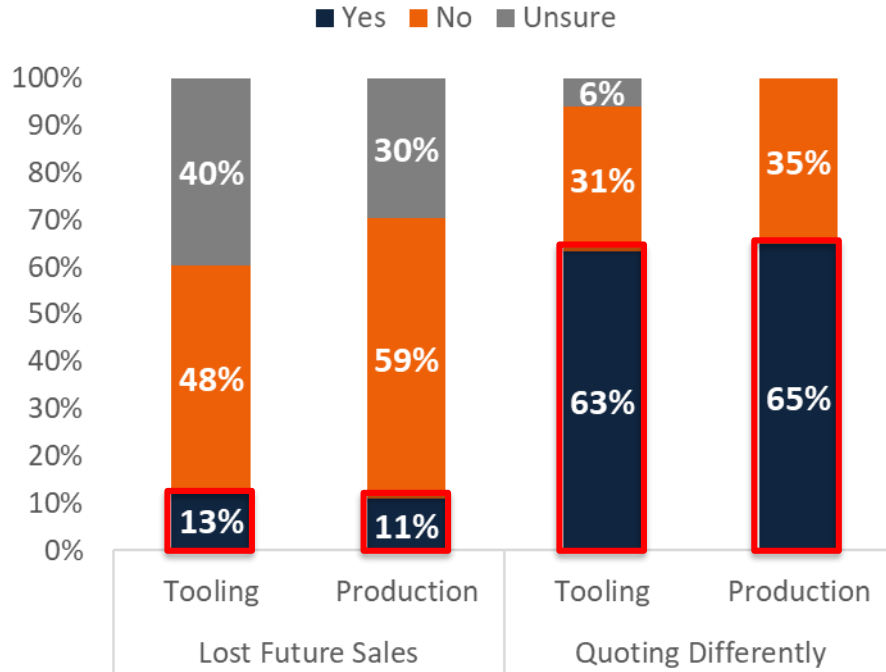


- Production facilities are seeing a slightly larger impact financial due to tariffs to date, but all shops anticipate a future financial impact.
- More shops are unsure than expected. Highlighting the need for shops to research the impact and prepare their organizations.

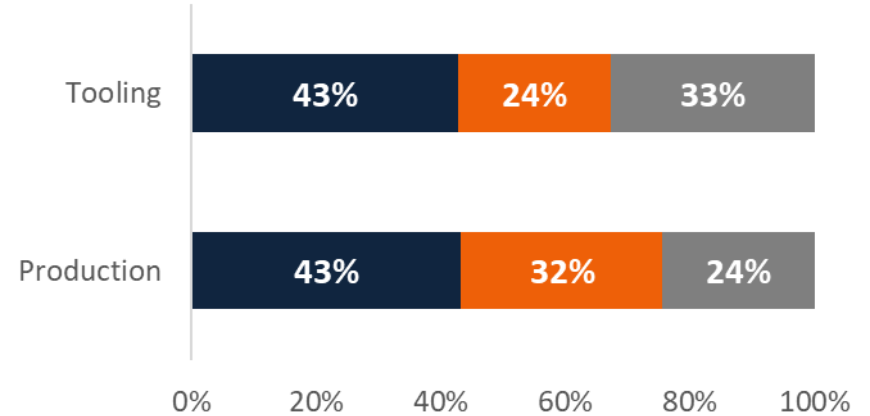
Question: Have you seen a financial impact to date due to the tariffs? Do you anticipate seeing a financial impact due to the tariffs?
Shop Type: Mold and Die Builders, Stamper, Molder, Die Casting and Machining

Tariffs Impacting How Shops are Quoting

Tariff Impact on Business



Customer Resisting Increased Costs?

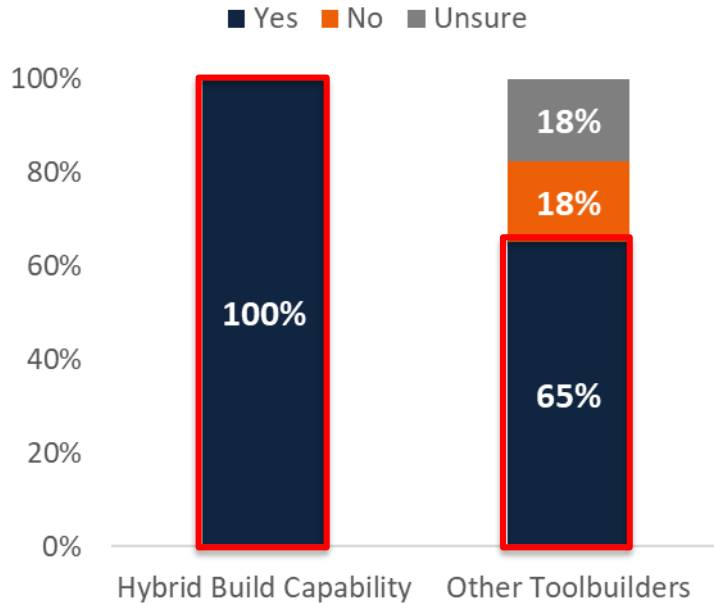


The majority of shops are quoting differently due to the tariffs; some have even lost future sales but too many shops are unsure.

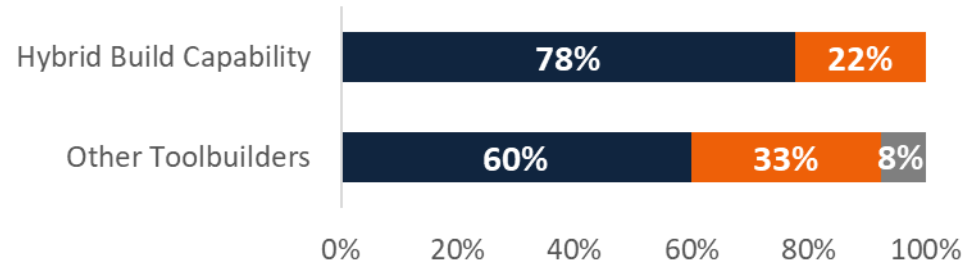
Question: Have you seen a loss of future sales due to tariffs? Are you quoting differently due to the tariffs? Are you seeing resistance from your customers to pay for increased costs associated with the tariffs? Shop Type: Mold and Die Builders, Stamper, Molder, Die Casting and Machining

Tariff Impact On Hybrid Build Business Models

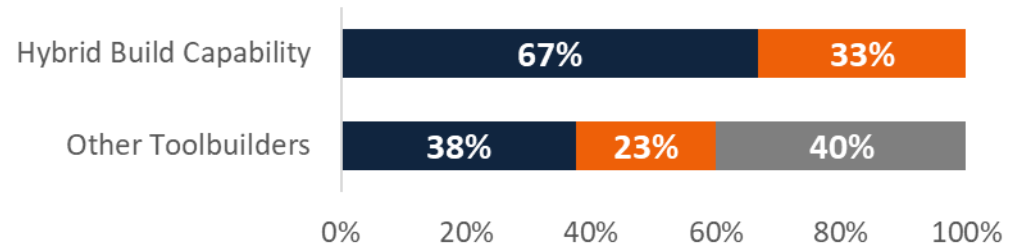
Tariff Future Financial Impact Anticipated



Quoting Differently



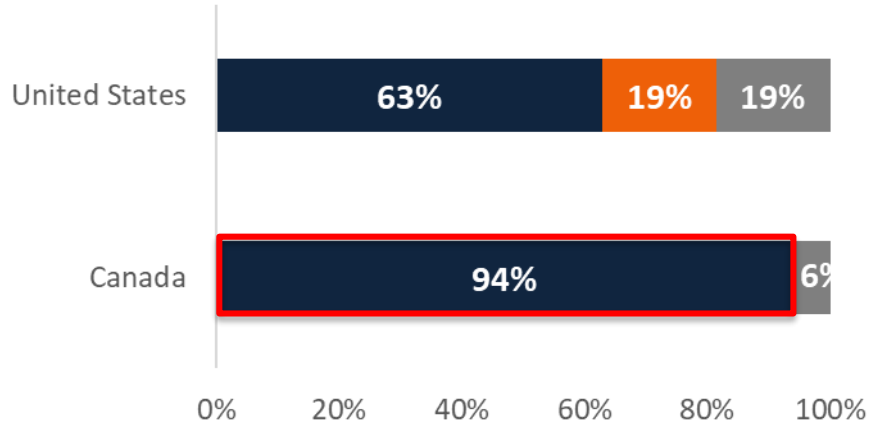
Customers Resisting Increased Costs?



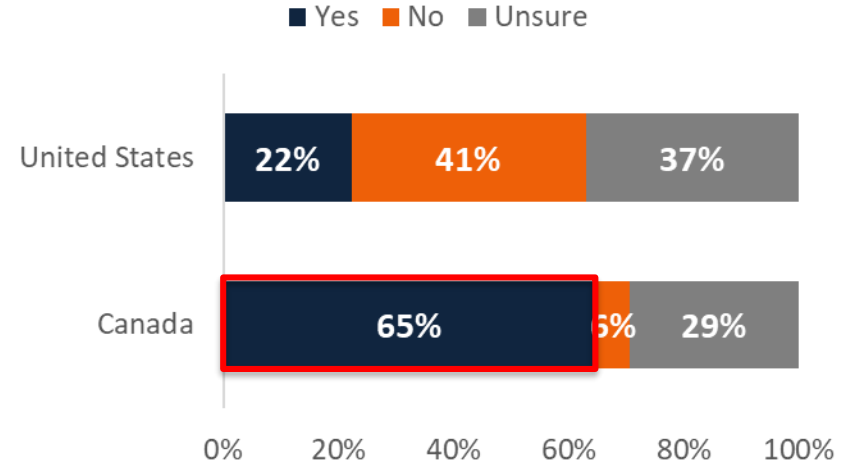
Question: Shop Do you anticipate seeing a financial impact due to the tariffs? Are you quoting differently due to the tariffs? Are you seeing resistance from your customers to pay for increased costs associated with the tariffs? Shop Type: Mold and Die Builders

Financial Impact Due to Tariffs Varies by Country

Tariff Future Financial Impact Anticipated



Customers Resisting Increased Costs?



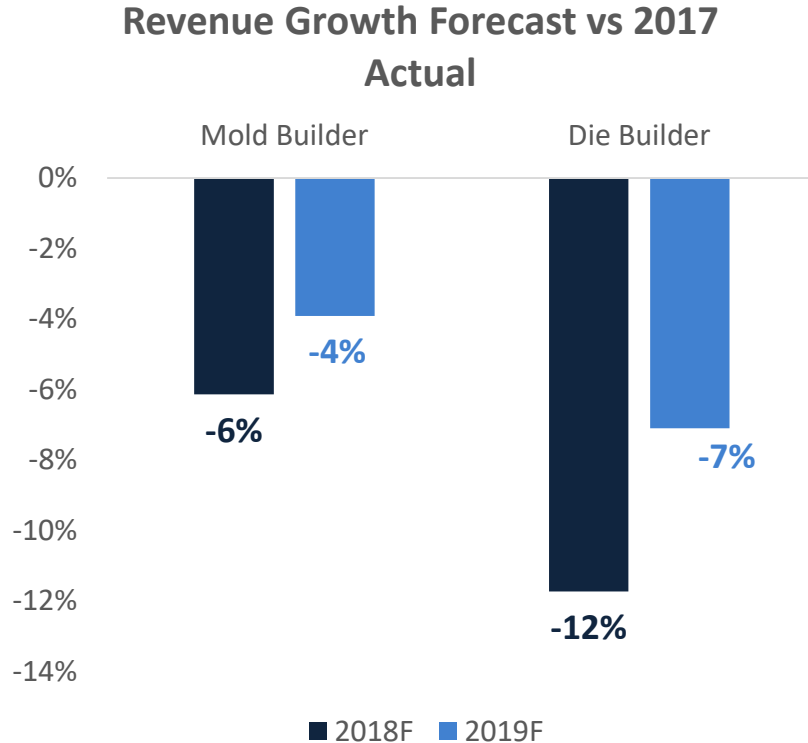
The financial impact felt due to tariffs has been similar for both the U.S. and Canada, however, Canadian shops anticipate more future impact largely due to lack of resolution with NAFTA.

*Question: Do you anticipate seeing a financial impact due to the tariffs? Are you seeing resistance from your customers to pay for increased costs associated with the tariffs?
Shop Type: Mold and Die Builders*

OESA Tooling Barometer – September 2018

Q3 THEME: SALES AND QUOTING

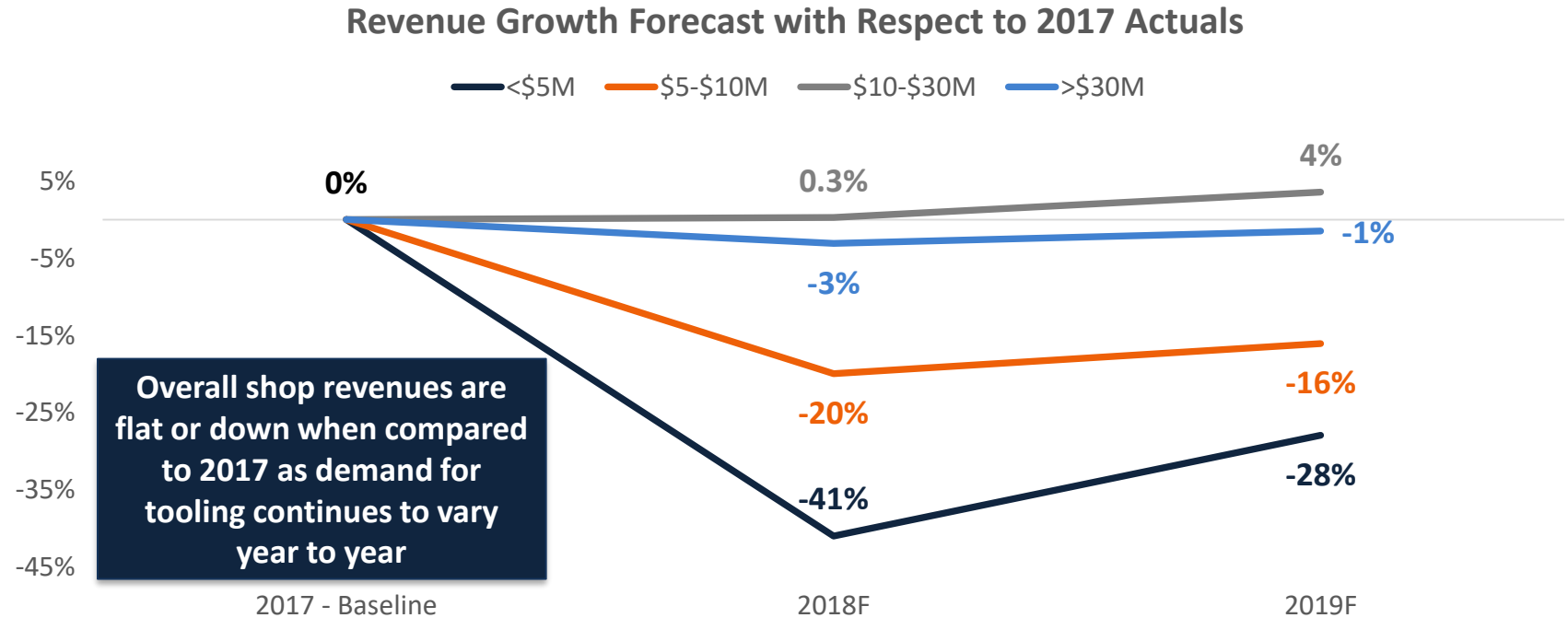
Revenue Growth Stable Since 2017



- Overall 2018 forecasts are down slightly however, 2017 was the largest year in history.
- The industry is leveling out with less outsourcing and more managed levels of business based on this forecast.
- Mold and die shops have different lead time which is the reason for die shops being down more significantly in 2018.

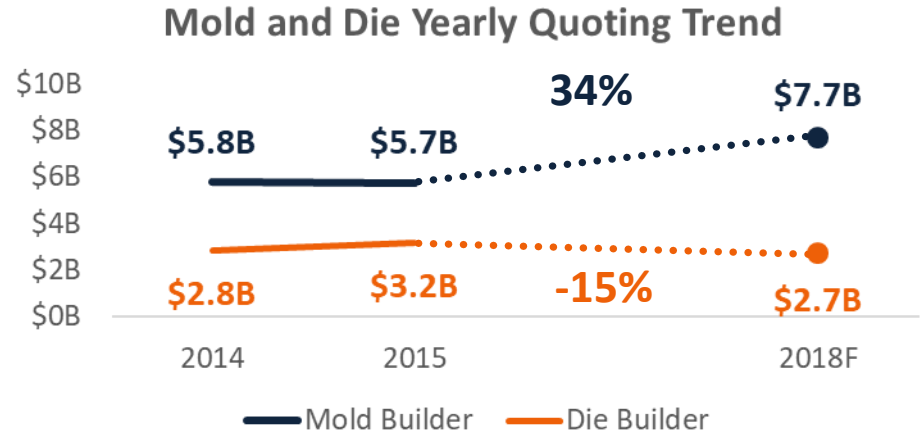
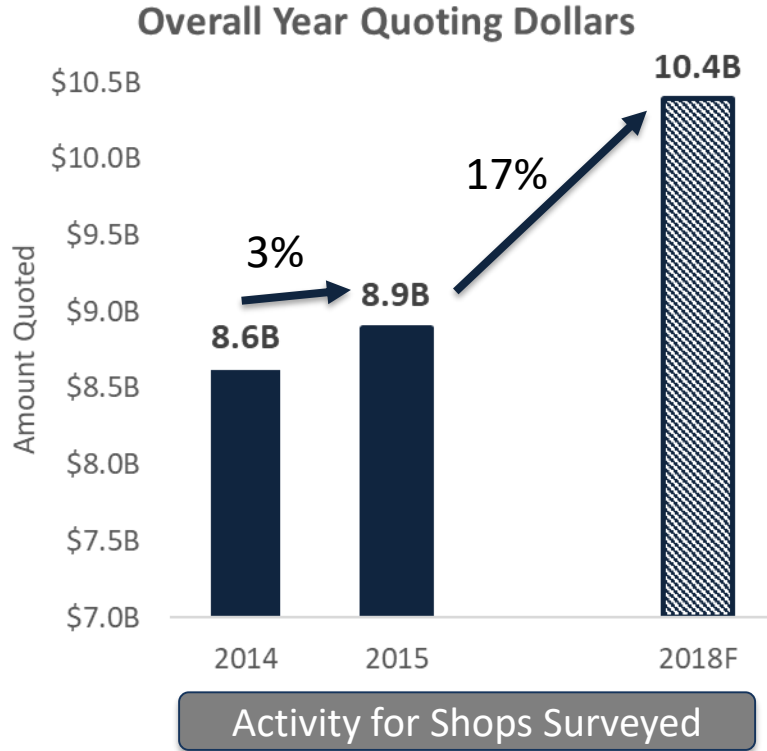
Question: What is your facility's anticipated revenue for calendar year 2018, 2019? Shop Type: Mold and Die Builders

Revenue Growth Forecast by Size



Question: What is your facility's anticipated revenue for calendar year 2018, 2019? Shop Type: Mold and Die Builders

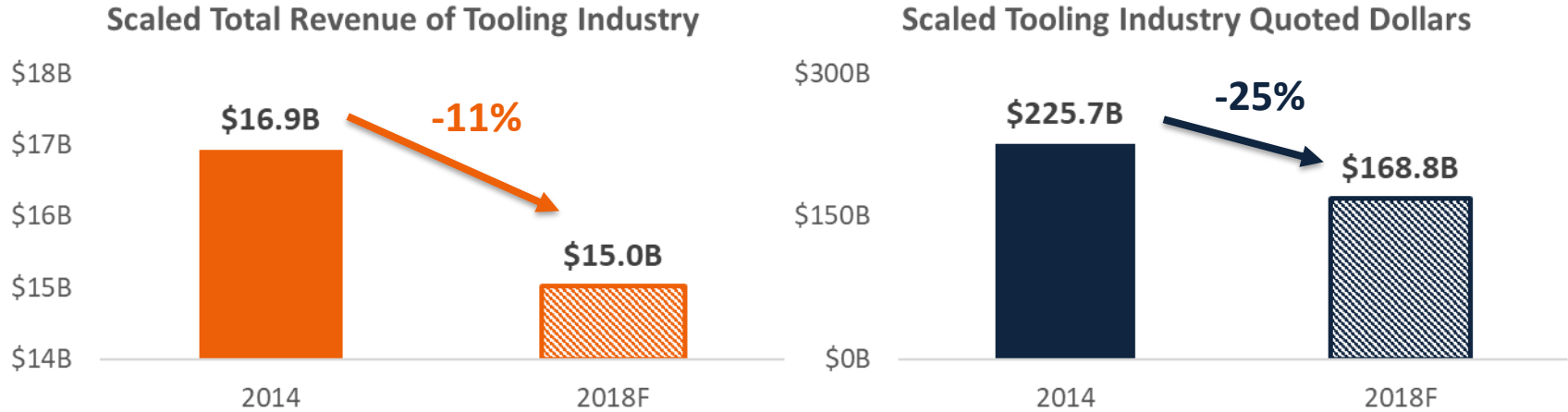
Overall Quote Volume is Up Considerably



Overall tool shops are quoting more than three years ago, driven largely by mold builders. Die shops are quoting 15% less than in 2015.

Question: How much have you quoted, in dollar value, in total for January 2018 through June 2018? What was the total dollar amount your facility quoted on tools in 2015?
Shop Type: Mold and Die Builders

Industry Quote Data Estimated Over \$160B



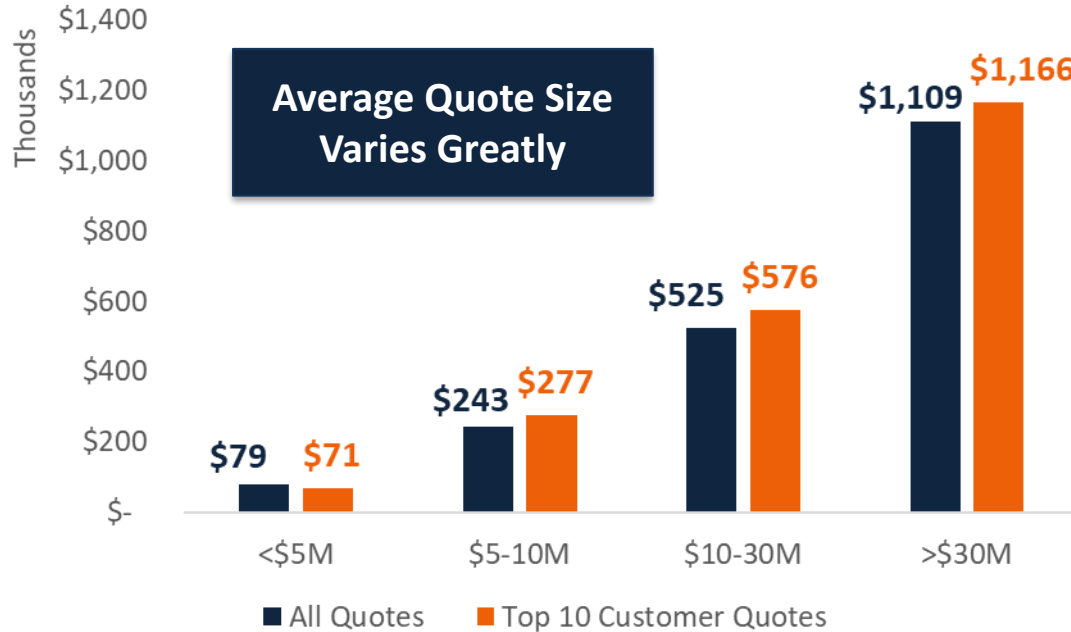
Shops greater than \$50M have the highest quote activity closely followed by shops that are \$10-20M. Shops quoting the least are those from \$20-50M.

Scaled data calculated based on survey data scaled to 500 shops

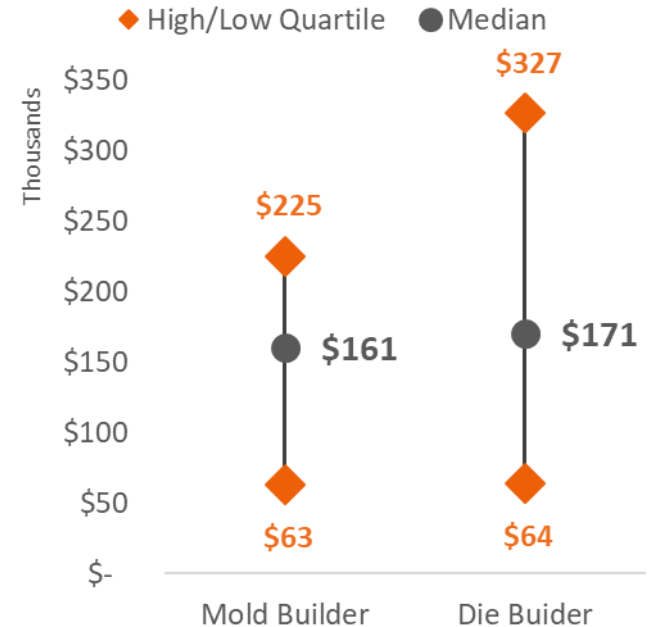
Question: How much have you quoted, in dollar value, in total for January 2018 through June 2018? What was the total dollar amount your facility quoted on tools in 2015? What is your facility's anticipated revenue for 2018? What was your facility's revenue for 2015? Shop Type: Mold and Die Builders

Quote Size for Top Customer Typically Larger

Average Quote Size



Average Quote Size

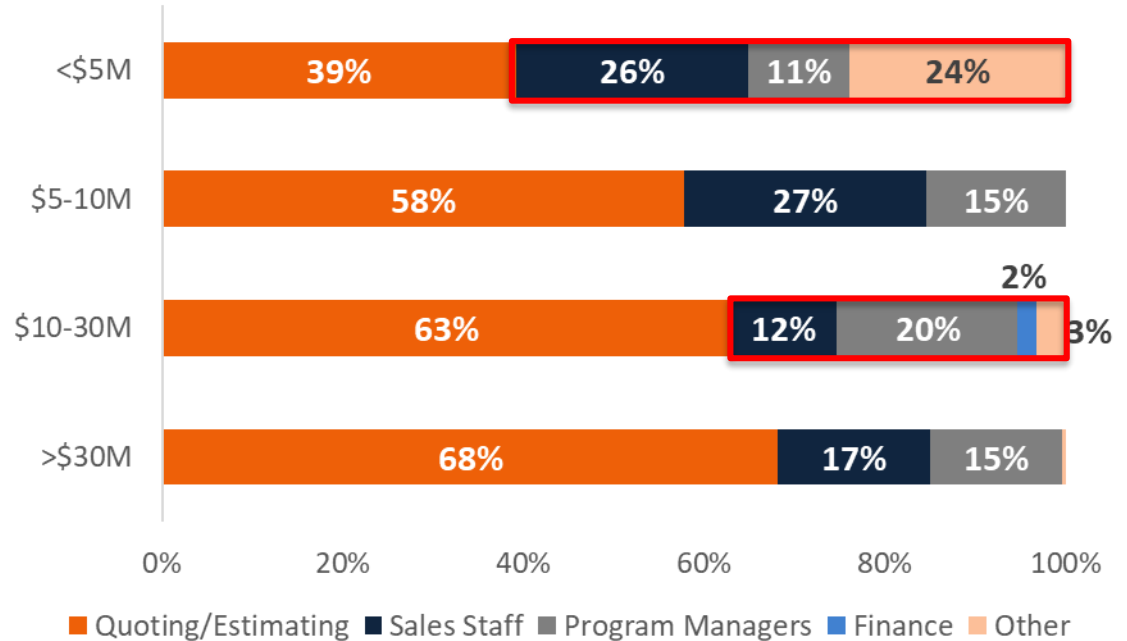


Question: How much have you quoted, in dollar value, in total for January 2018 through June 2018? What is your facility's anticipated revenue for 2018?
 Shop Type: Mold and Die Builders

Quoting Activity Varies by Shop Size

- The smallest shops have the most diversity in who quotes work while the largest shops focus on centralizing quoting within a specific department.
- Shops from \$10 to \$30M have greater variety, which may be attributed to owners along with a larger support staff quoting to help grow the business.

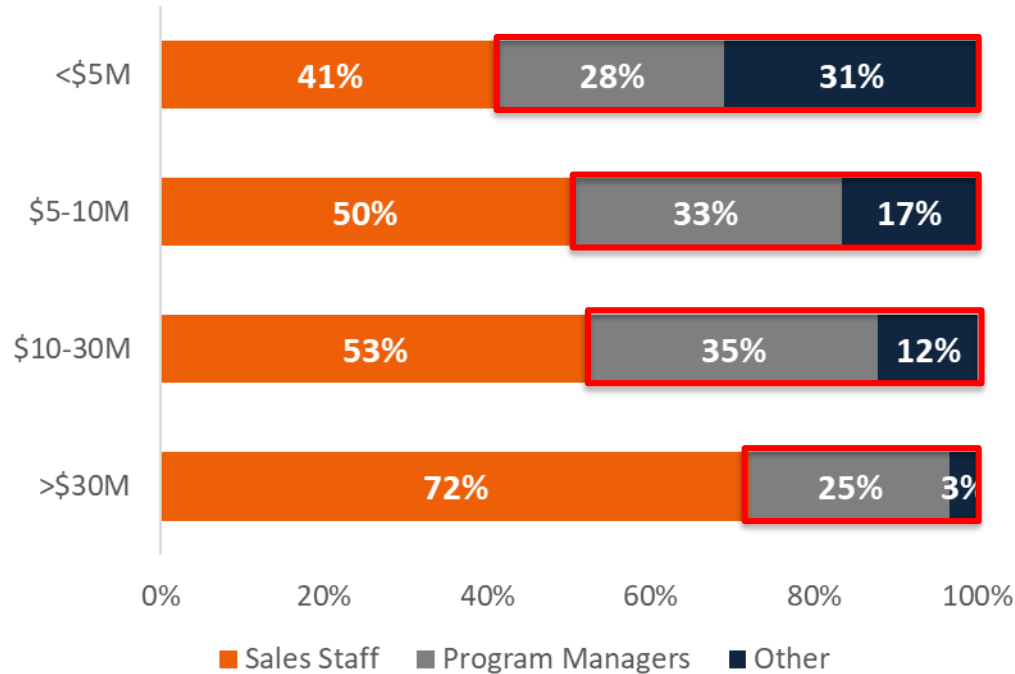
Staff Percent Quoting Activity



Question: Shop Type: How many sales, quoting and estimating employees does your facility currently employ in the following departments: Quoting/Estimating, Sales, Program Management, Finance? In your facility, what percent of quoting do the following staff complete: Quoting/Estimating, Sales Staff, Program Managers, Finance, Other? Shop Type: Mold and Die Builders

Revenue Generation Distributed by Employees

Employee Sales Revenue Activity

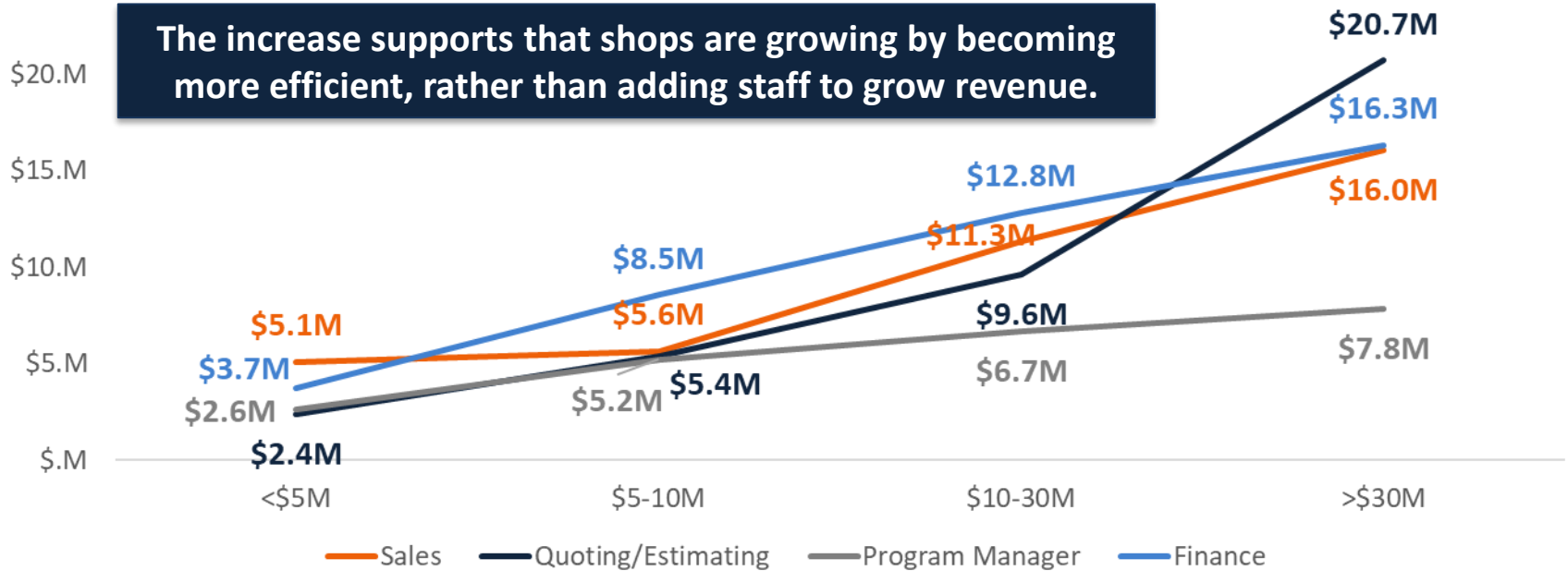


- As shops grow in size, they depend upon their sales staff to generate more revenue than any other department.
- However, a quarter or more of sales is generated by staff members other than sales, no matter the size of the shop.

Question: What percent of sales revenue is generated by each group: Sales Staff, Program Managers, Other? Shop Type: Mold and Die Builders

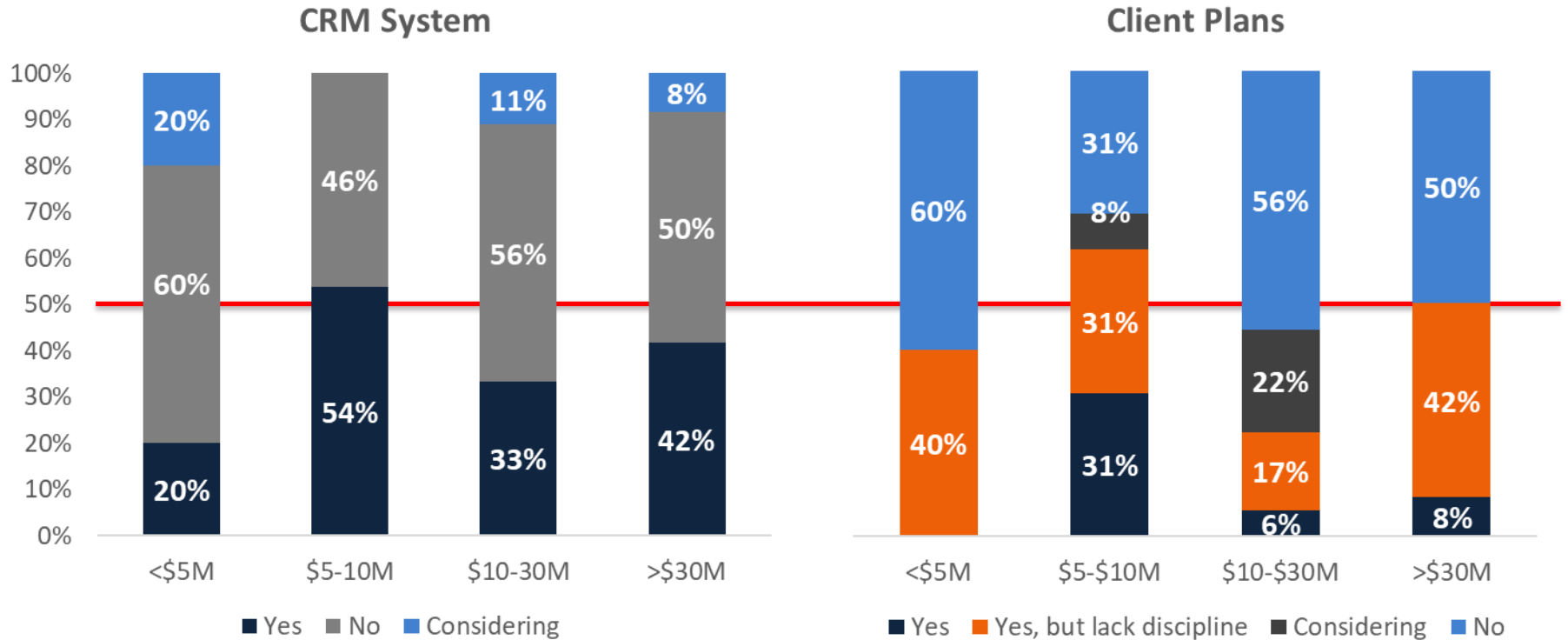
Revenue Per Sales/Quoting Employees

Revenue Per Employee



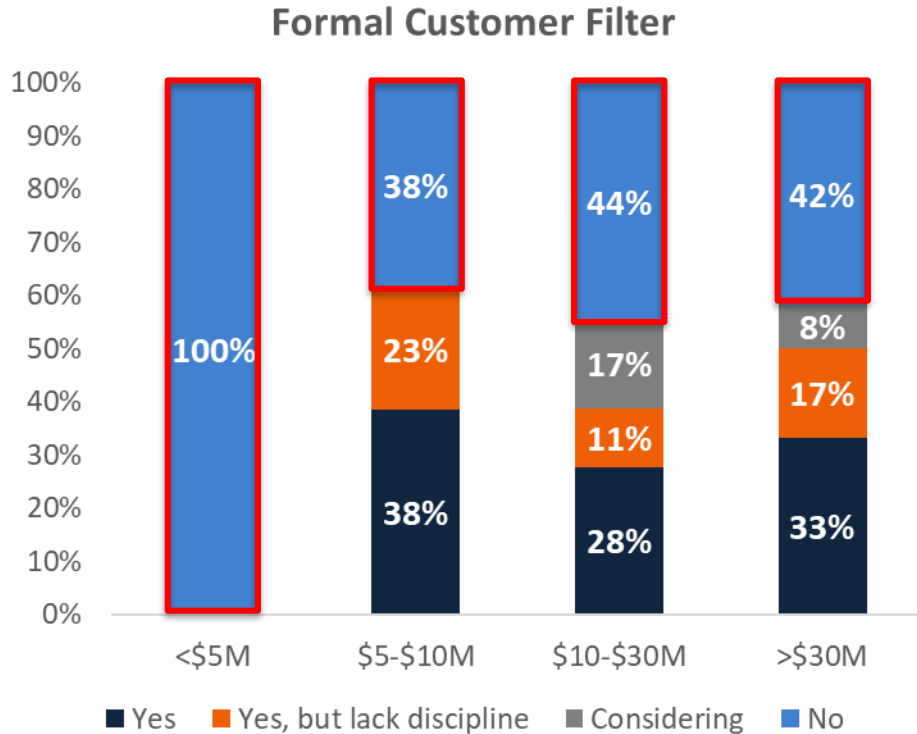
Question: What is your facility's anticipated revenue for calendar year 2018? How many sales, quoting and estimating employees does your facility currently employ in the following departments: Sales, Quoting/Estimating, Program Management, Finance? Shop Type: Mold and Die Builders

Use of CRM Systems and Client Plans



Question: Does your facility have a CRM software? Does your facility use formal client plans? Shop Type: Mold and Die Builders

Small Shops Do Not Leverage Customer Filters

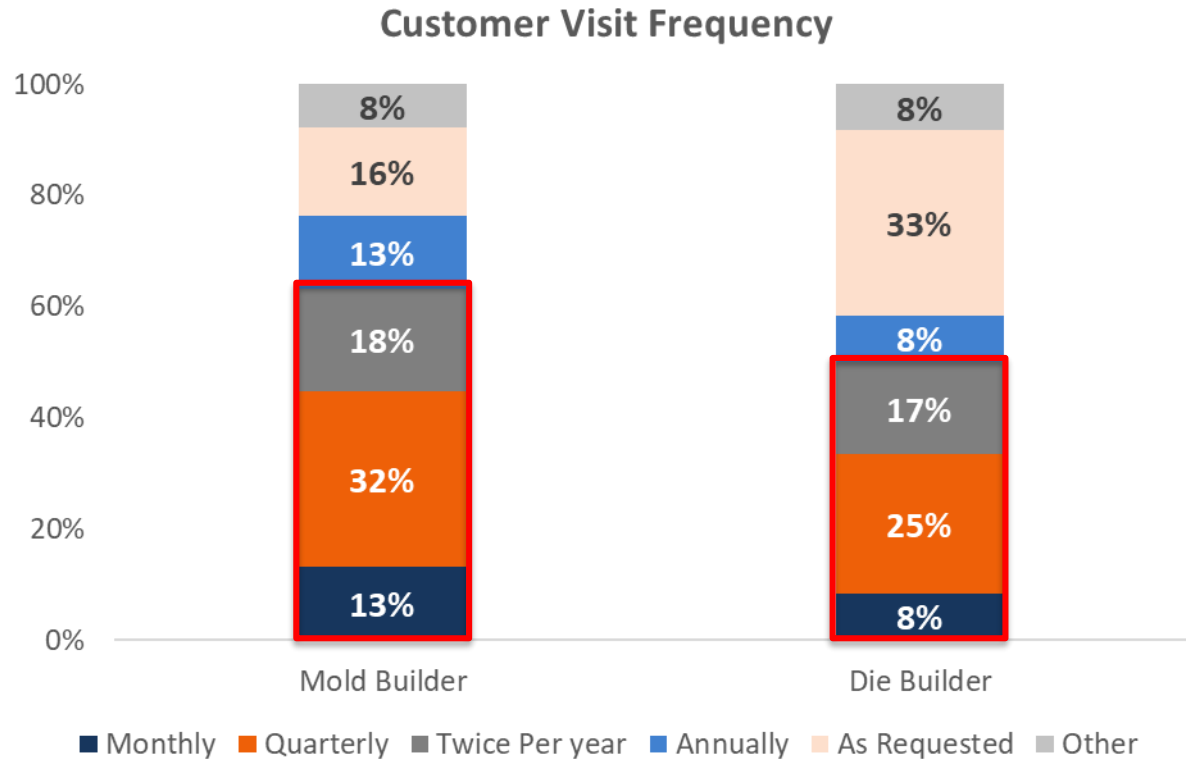


Filter Criteria	% Respondents with a Filter
Part/Commodity – Size, Complexity, etc.	29%
Strategic or Historic Customer	24%
Location	14%
Size of Opportunity	13%
Finance – Payment Terms, Security	10%
Other (timing, historic performance, margins)	10%

Question: Do you have a formal customer filter to evaluate the fit of the customer or project to your organization? Shop Type: Mold and Die Builders

Frequency of Customer Visits

- Overall shops have limited use of CRM systems, client plans and client filters.
- Without these tools customer visits to understand future needs are critical.
- Mold builders do a better job staying in front of their customers.



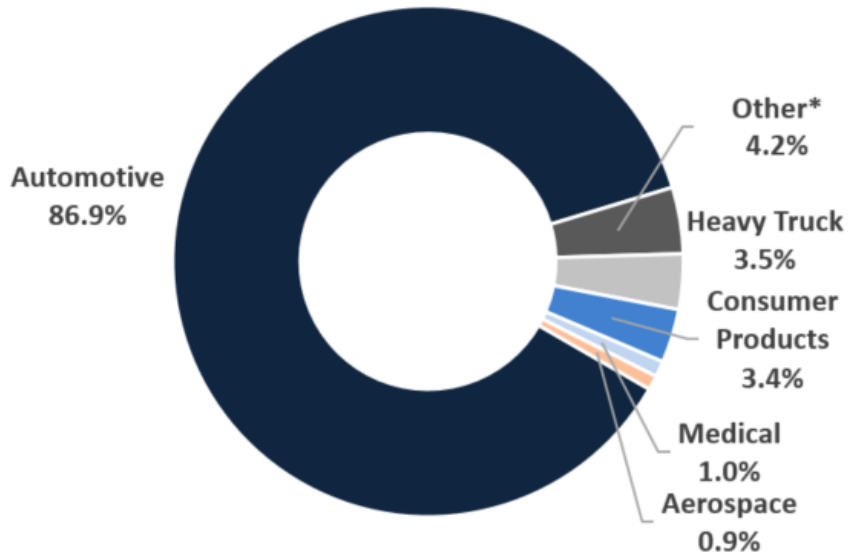
Question: How often do you visit your key customers for strategic visits? Shop Type: Mold and Die Builders

OESA Tooling Barometer – September 2018

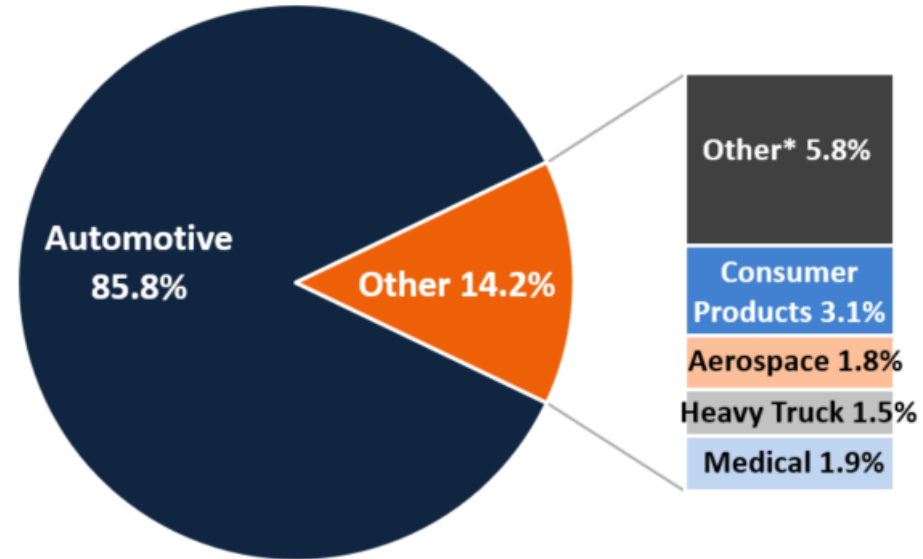
Q3 THEME: CUSTOMER DYNAMICS

Automotive Dominates Tooling Revenue

Tooling Revenue By Industry (2015)



Tooling Revenue By Industry (2018)

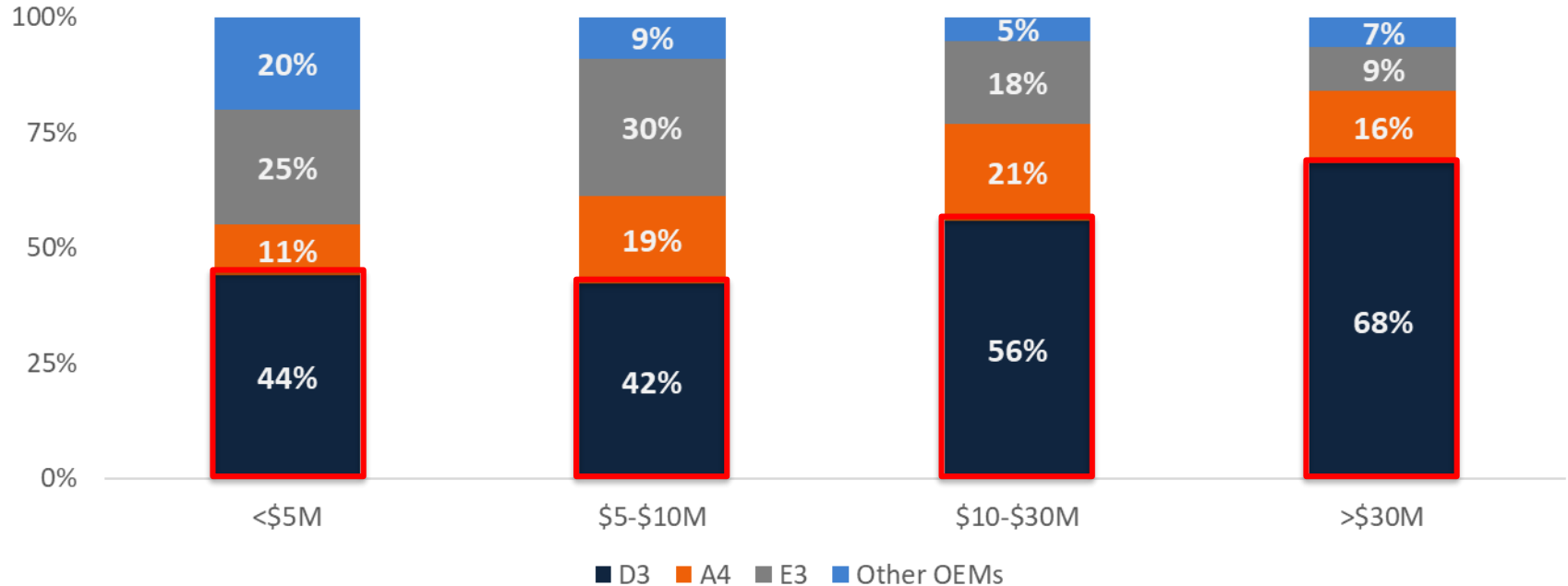


*Other Contains – Appliance, Construction, Oil and Gas, Powersports, and Telecom/Electronics

Question: Please allocate your facility's approximate revenue, as percentages, for January 2018 through June 2018 into the industries below: Aerospace, Appliance, Automotive, Construction, Consumer Products, Defense, Heavy Truck, Medical, Oil and Gas, Powersports, Telecom/electronics, Other. Shop Type: Mold and Die Builders

D3 Dominates NA Automotive Tooling Revenue

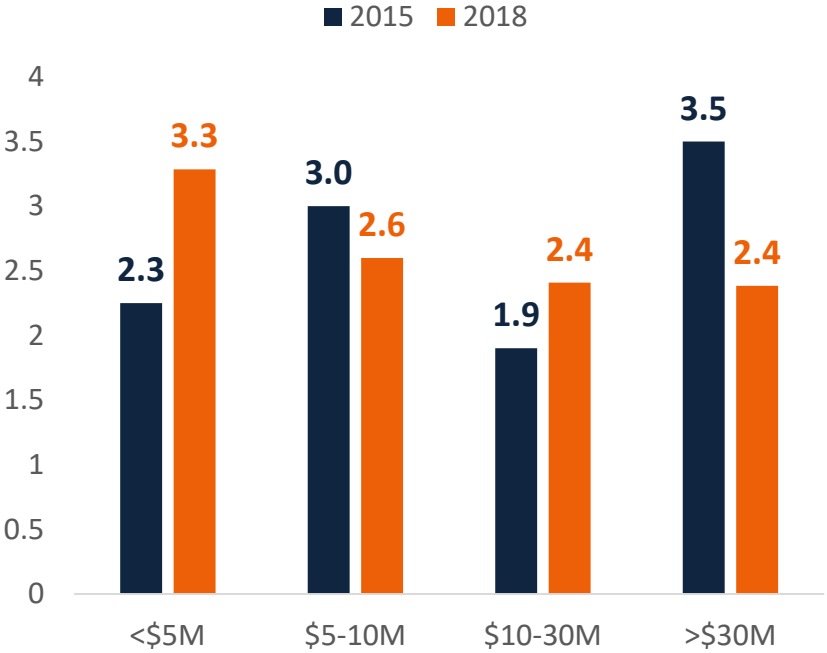
Automotive Tooling Revenue by OEM Group



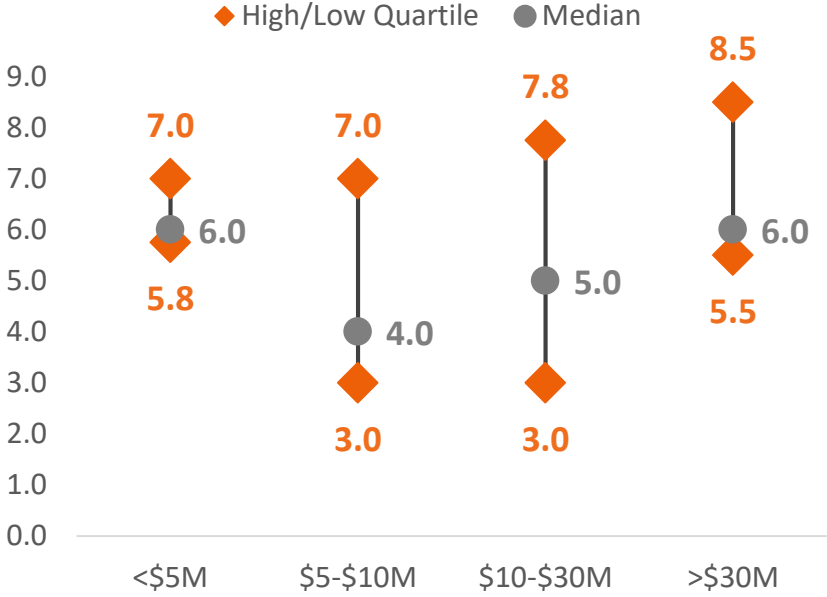
Question: If you listed automotive as one of your industries, please outline below your approximate revenue (direct and indirect), as percentages, for each OEM grouping.
Shop Type: Mold and Die Builders

Majority of Shops Less Diverse Than in 2015

Average Number of Industries Served



Number of Customers 80% of Revenue



Question: Please allocate your facility's approximate revenue, as percentages, for January 2018 through June 2018 into the industries below: Aerospace, Appliance, Automotive, Construction, Consumer Products, Defense, Heavy Truck, Medical, Oil and Gas, Powersports, Telecom/electronics, Other. Shop Type: Mold and Die Builders

OEMs Continue to Create Challenges for Shops

OEM	Ranking	Completeness of Data	Timeliness of Releases	Part Complexity	Compressed Timing	Timely Payment
Honda	2.70	3.3	2.3	2.3	2.8	2.8
Toyota	2.66	2.9	2.9	2.6	2.6	2.3
FCA	2.42	3.2	2.5	2.2	2.2	2.0
Average	2.42	3.15	2.43	2.06	2.35	2.11
Ford	2.38	2.9	2.5	2.1	2.4	2.0
GM	2.38	3.1	2.5	2.2	2.3	1.8
Nissan	2.32	2.8	2.6	2.0	2.2	2.0
VW	2.26	3.7	2.3	1.3	2.0	2.0
BMW	2.24	3.3	1.8	1.8	2.3	2.0

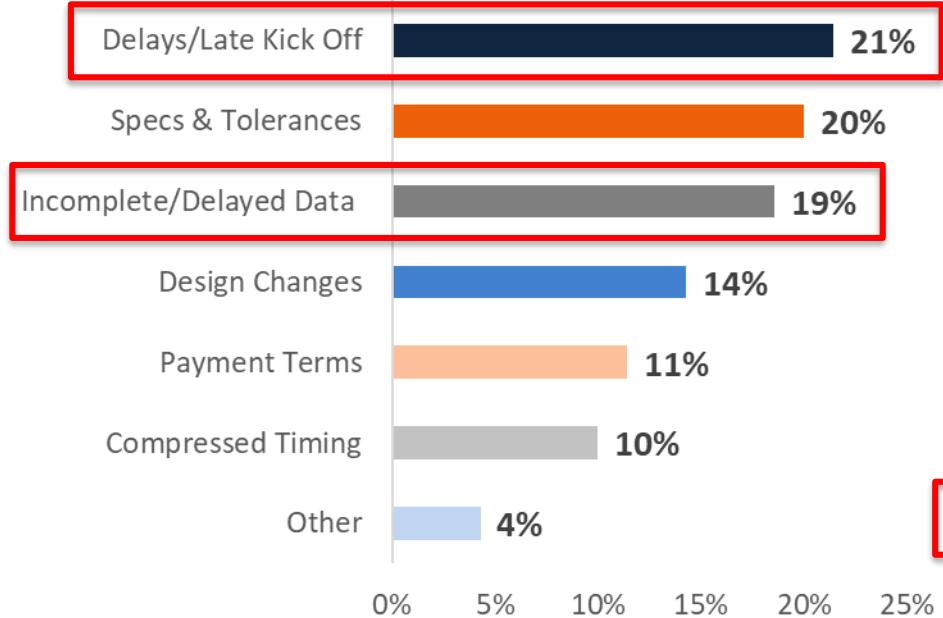
Key:  <2.8

5 Point Scale: 5 = Above Average, 4 = Slightly Above Average, 3 = Average, 2 = Slightly Below Average, 1 = Below Average

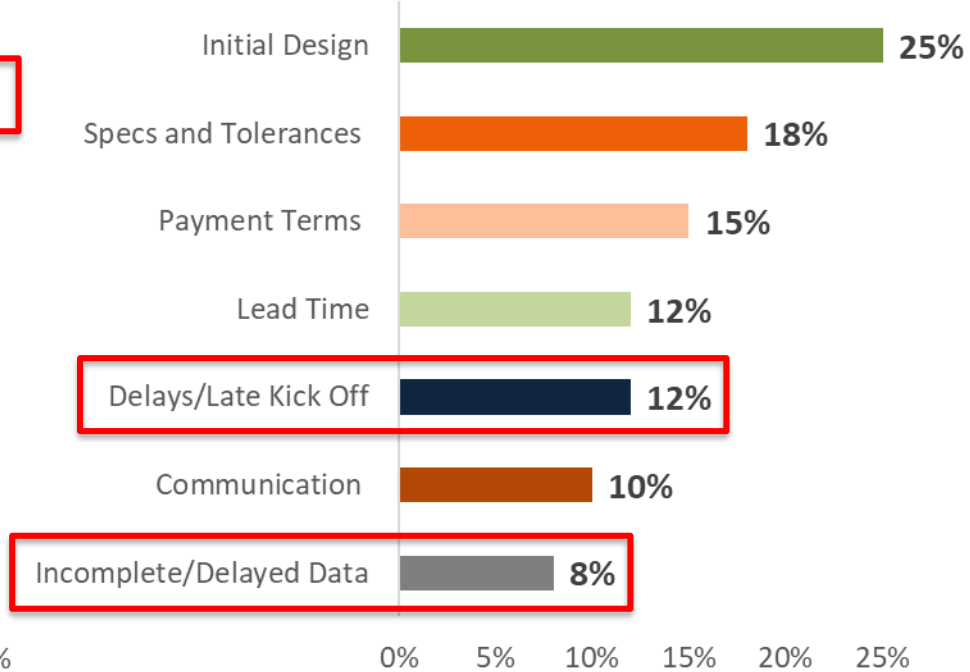
Question: Who are your top 5 largest end use customers? Please rank your top 5 customers on the following categories? Shop Type: Mold and Die Builders

OEM Data Issues and Delays Prominent Issue

OEM Cost and Complexity Drivers (2018)



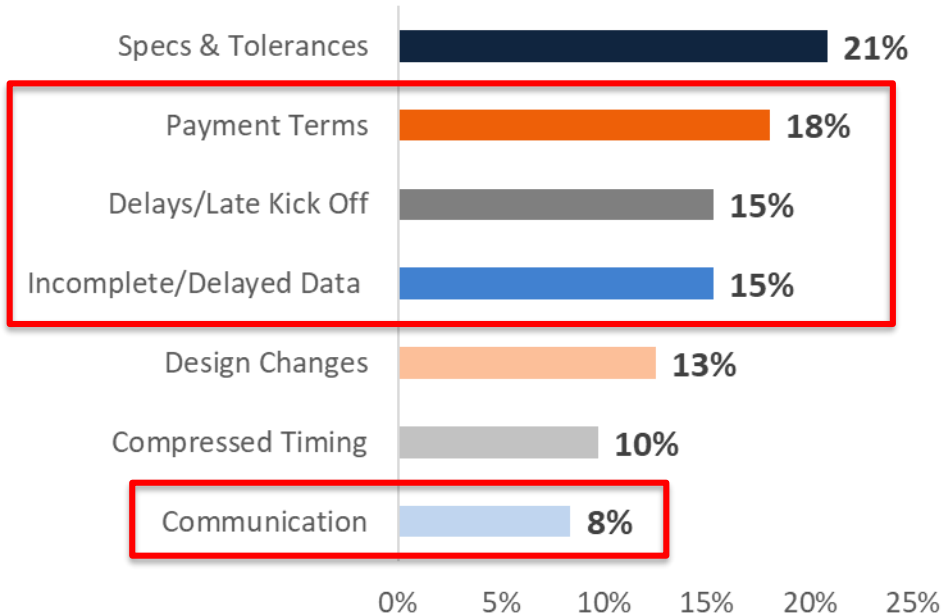
OEM Cost and Complexity Drivers (2015)



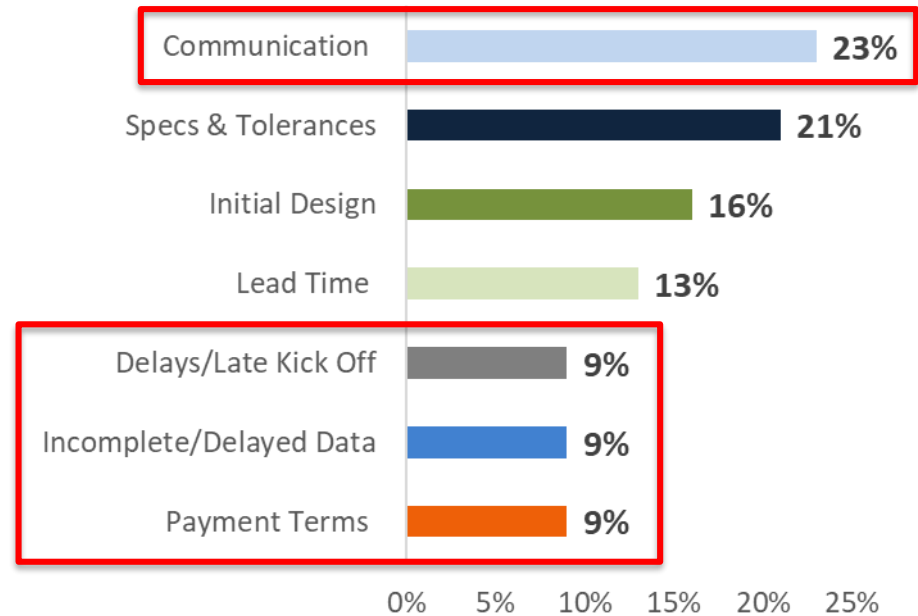
Question: What are the top 3 drivers of unnecessary cost or complexity from your OEMs? Shop Type: Mold and Die Builders

Tier Complexity Issues Have Shifted

Tier 1 Cost and Complexity Drivers (2018)



Tier 1 Cost and Complexity Drivers (2015)



Question: What are the top 3 drivers of unnecessary cost and complexity from your top customers? Shop Type: Mold and Die Builders

Summary

- Overall the first eight months of 2018 have been slower than expected; new work will kick off in Q4 but manufacturing will take place in 2019.
- Sentiment decreased quarter over quarter, due to flat utilization, increased work on hold, low on-time payments and uncertainty due to the political environment.
- The impact of tariffs on the tooling industry varies slightly based on business model and country, however, it is clear that tariffs are having a large impact on the industry.
- Revenue growth is flat but quote activity in 2018 is picking up.
- Very few shops are leveraging tools such as client plans and customer filters to more strategically quote and generate sales.
- OEMs continue to create challenges for tool suppliers with late releases, incomplete data, more complex product that is difficult to build and constant pressure on price.

Harbour Results Partners



Thank you for the opportunity

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