



Preparing for the future, while optimizing the present

2017 Q1 Pulse Survey March 2017



Survey Overview

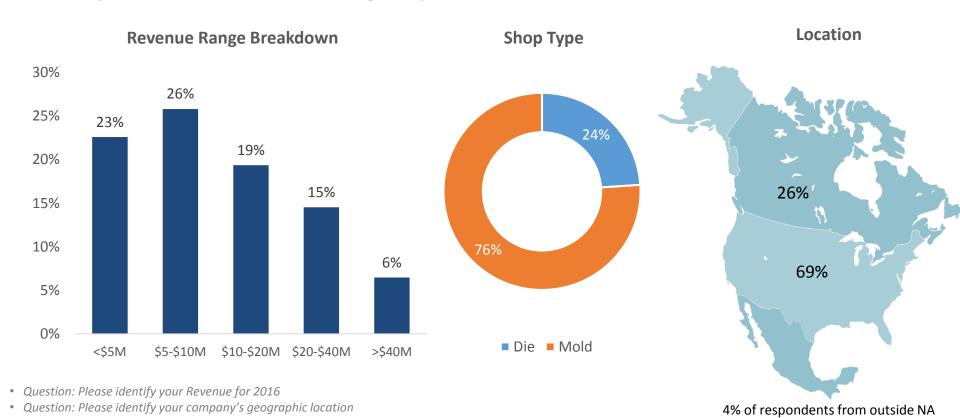
 Harbour Results' 2017 Q1 survey covered a quick update on the tooling industry current state.
Additionally, it tackled brief dives into shops' outsourcing behaviors and ERP system usages.

 Survey population includes a total of 74 respondents, with 76% mold shops and 24% die shops.

TOOLING BAROMETER

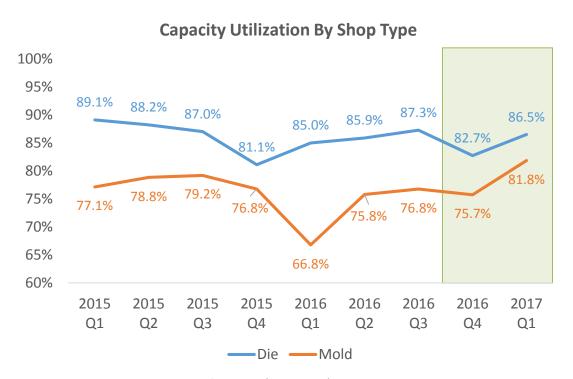


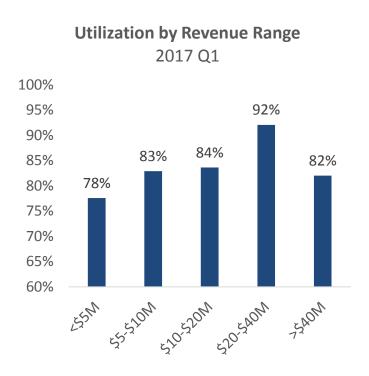
Respondent Demographics



Slower End to 2016 Followed by Strong 2017 Start

\$20-\$40M Shops Experiencing Peak Capacity



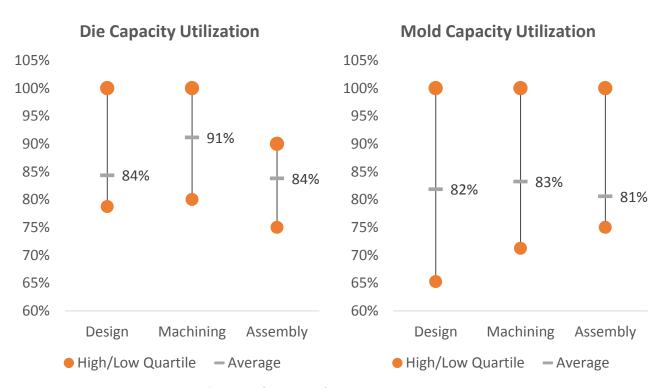


[•] Question: Current capacity utilization for design/machining/assembly



Overall Shops' Capacities Around 80% Utilized

Mold Market Experiencing More Variation in Capacity



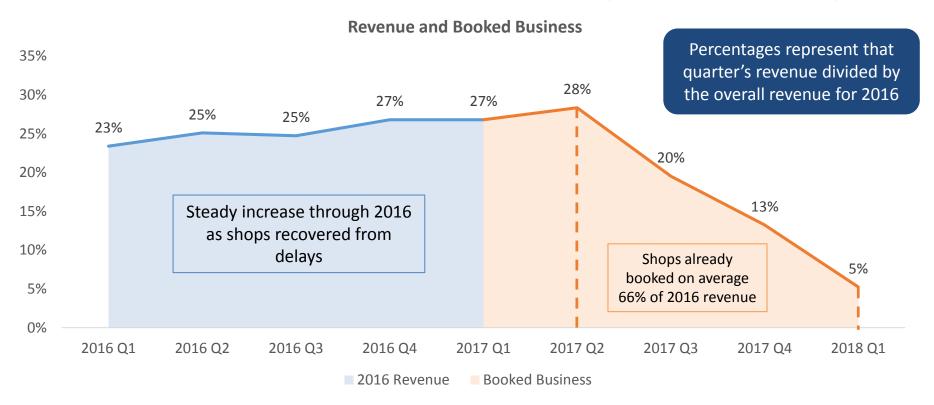
While mold average utilizations are lower than those of die shops, there is a greater divide in the mold area.

While there are shops running at or above 100% capacity in the mold market, there is the opposing cluster of shops struggling to fill their floors.

[•] Question: Current capacity utilization for design/machining/assembly



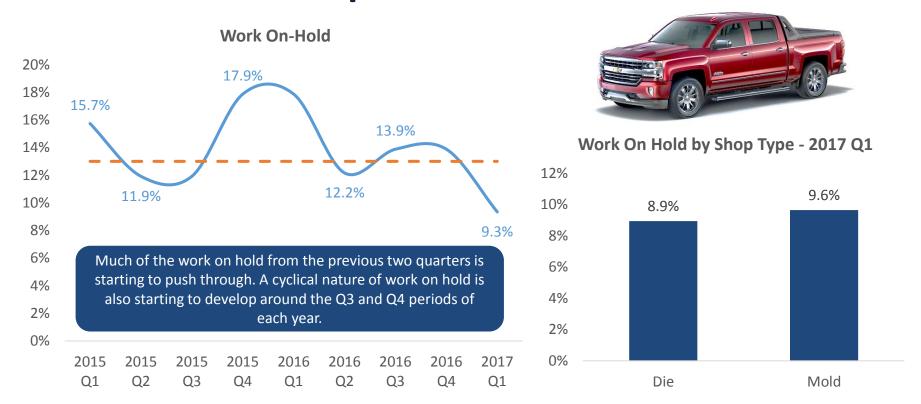
Slow 2016 Revenue Climb Into Strong 2017 Bookings



[•] Question: Quarterly Revenue; Quarterly Booked Business



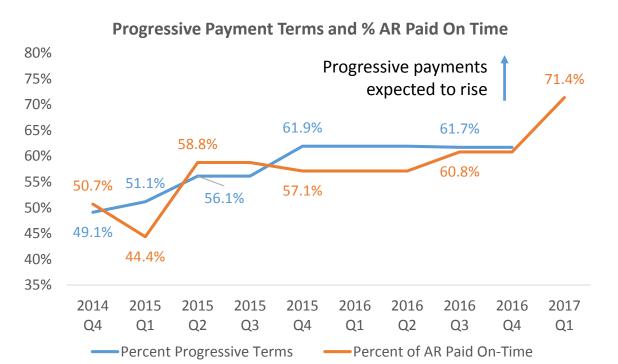
Work On Hold Drops To Under 10%



[•] Question: What percent of jobs that you have been awarded are currently on hold due to reasons outside of your control?



Payment Terms and Timing Continue to Improve

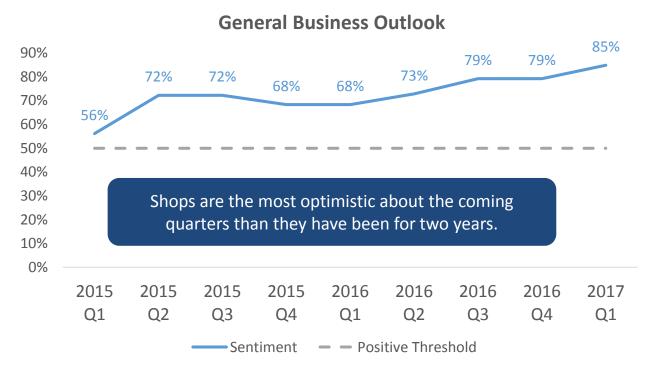


Large shops are seeing the fewest progressive terms of all shops, but are often having to provide progressive terms to their outsource suppliers.

Question: Over the past three months, approximately what percent of your: new booked business includes progressive payment terms; accounts receivables were being paid within contract terms



Sentiment at Two Year High



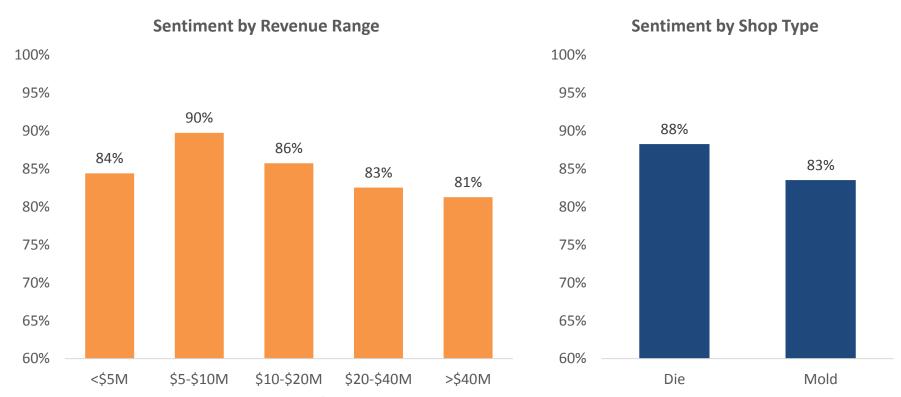
Increased utilization, better payment terms and timing, and lower work on hold levels are all building up to a healthy 2017.

Sentiment	% of Respondents
Pessimistic	0%
Somewhat pessimistic	1%
Neutral	6%
Somewhat Optimistic	45%
Very Optimistic	48%

[•] Question: Over the next three months, the general outlook for your business is:



Sentiment at Two Year High



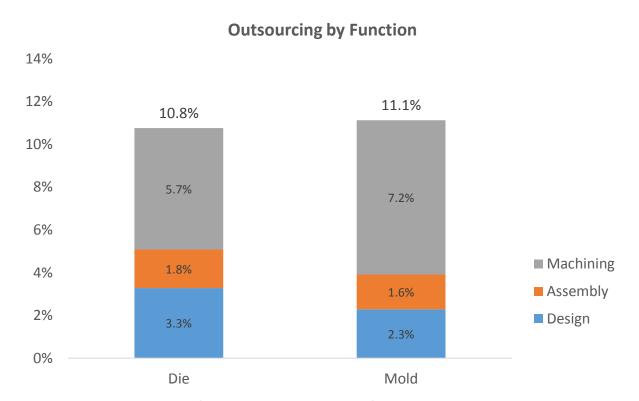
[•] Question: Over the next three months, the general outlook for your business is:



OUTSOURCING



Shops Outsourcing Significant Work



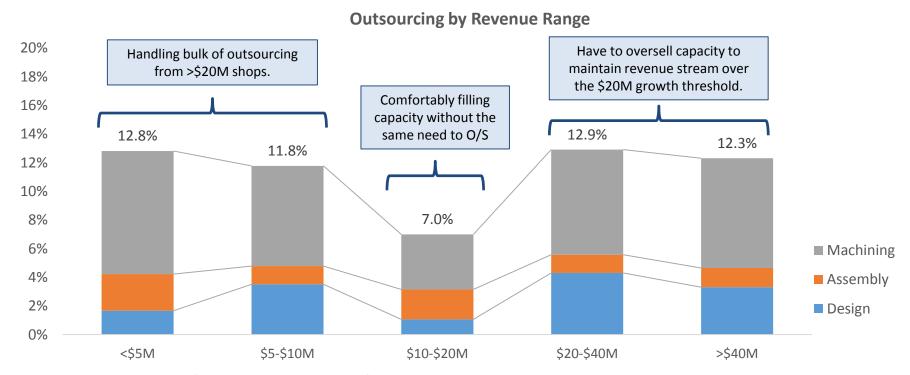
Shops are finding themselves outsourcing more than in past years, especially in machining and design.

This increase in outsourcing work has significant implications on these shops' abilities to meet cost, quality and delivery requirements for their customers.

[•] Question: How much work is your facility currently outsourcing by function?



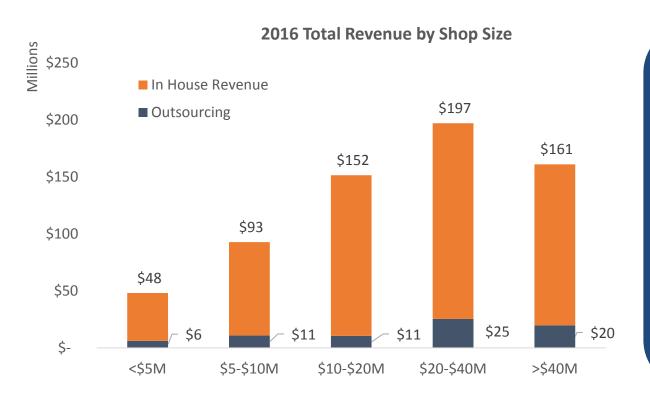
Shops of Most Sizes Consistent In Outsourcing Amount



[•] Question: How much work is your facility currently outsourcing by function?



Outsourcing Becoming Part of Tooling Industry Model



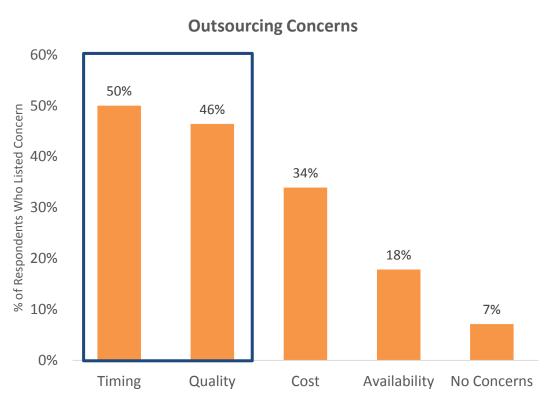
The survey population represents \$686M in tooling revenue. \$73M of this was reported as outsourced.

When scaled for a tooling industry estimated around \$13.5B, outsourcing would represent over \$1.5B in revenue. This is the equivalent of 150 \$10M tool shops, in outsourcing work alone.

• Question: How much work is your facility currently outsourcing by function?



Outsourcing Concerns Shared Across Industry



As outsourcing increases, shops are forced to outsource beyond their "A" list of suppliers as they run out of capacity.

Almost half of the shops surveyed indicated the ability of outsource shops to meet timing and maintain quality on outsourcing were significant concerns.



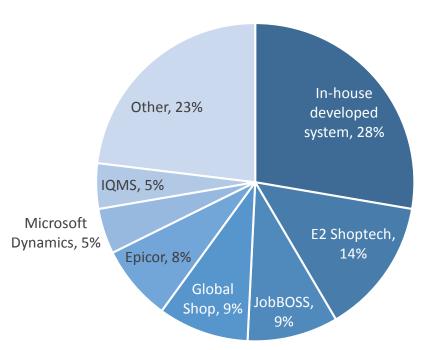
[•] Question: What concerns do you have about outsource work?

ERP SYSTEMS



Primary ERP Systems

Primary ERP Systems

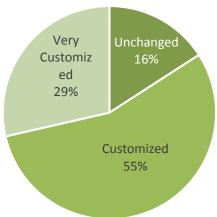


- Question: Which of the following ERP systems does your facility primarily use?
- Question: To what extent has your facility customized your primary ERP system?

Almost a third of shops are using some type of in-house developed system.

Additionally, 84% of shops list their primary ERP system as either customized or very customized, indicating a lack of bolt on ERP solutions for tool shops.

Primary ERP Amount of Customization



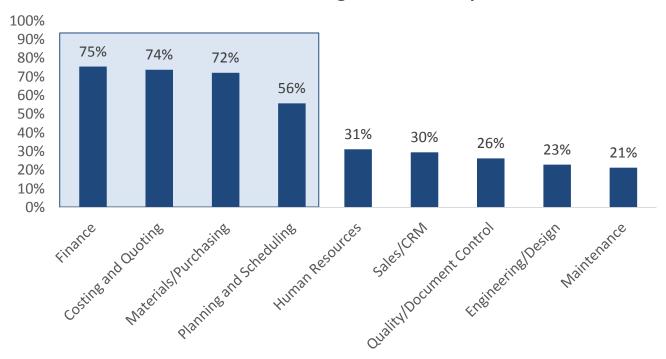
Other ERP Systems

- Infor VISUAL
- Sage
- Shop Logix
- Plex
- Visual EstiTrack
- Encompix
- SAP
- Genius
- Job Tracker



Shops Gravitating Toward Same Key Modules

Percent of Module Usage Within Primary ERP



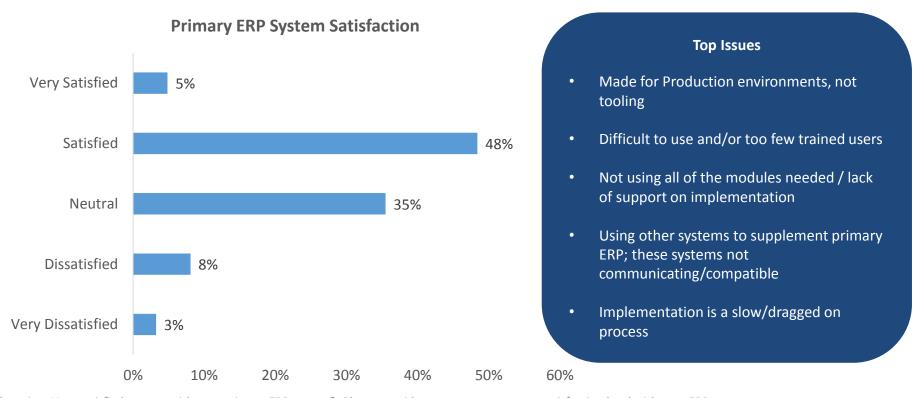
The majority of shops are using the finance, costing/quoting and purchasing modules from their primary ERP systems.

While a significant number of shops listed the planning/scheduling module, many of these shops indicated significant difficulties in getting these modules to work with the tool shop model.

Question: Which of the following modules does your facility currently use within your primary ERP system?



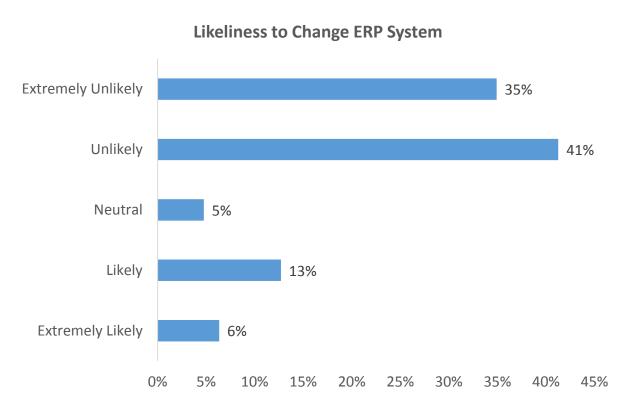
Roughly Half of Shops Satisfied With ERP Systems



Question: How satisfied are you with your primary ERP system?; Please provide some reasons to your satisfaction level with your ERP system.



Very Little Intention to Change ERP Systems



76% of respondents indicated little to no likelihood of switching ERP systems.

On top of a perceived lack of good options in the marketplace, the difficulties of switching ERP system are a large deterrent for shops.

[•] Question: How likely is your facility to change ERP systems in the next 18 months?



Summary

- All indicators point to a strong, healthy 2017
- The shift toward large tool shops functioning more like Tier suppliers continues
 - As a result, outsourcing is becoming a constant, necessary part of large tool shops' model.
- Tool shops continue to struggle to find ERP systems that work well for the tool shop model