MICHIGAN MANUFACTURING TECHNOLOGY CENTER

Know how you stack up against your competition. Use this information to help improve your quote win rates, demonstrate to your customers why you're better than the competition, or fulfill benchmarking requirements set forth by customers and quality management systems.

It can be difficult to identify where the biggest opportunities for improvement exist. Michigan Manufacturing **Technology Center's Transformation** Planner uses your company's financial and operating data to model the financial impact decision making will have on your PROFITABILITY.



Success doesn't just happen. It takes driven, dedicated, experienced, full-time professionals - like the kind at Michigan Manufacturing Technology Center (The Center), working together to keep Michigan manufacturing strong.

Since 1991, The Center has assisted Michigan's small and medium-sized businesses compete and grow. Through personalized services fitted to meet the needs of clients, we develop more effective business leaders, drive product and process innovation, promote company-wide operational excellence and foster creative strategies for business growth and greater profitability. Supported by the Michigan Economic Development Corporation as Michigan's National Institute of Standards and Technology Manufacturing Extension Partnership (MEP) affiliate, we bring welltested services to our MEP clients.



Transformation

Planner

Opportunity Assessment 2014

Thank you for taking the time to contact us and obtain access to the Opportunity Assessment. Based on the data provide in the Opportunity Assessment Survey, the following report identifies opportunity in nine critical transformation drivers:

- Inventory Turns
- Utilities
- Scrap and Rework
- Premium Freight
- Days Receivables
- On-Time Delivery
- Machine Run Hours
- Schedule Bumping
- Employee Turnover

As you review your report, we commonly refer to the "Percentile." This is your relative position in the selected comparison group for each transformation driver. For example, if you're percentile is 70, you perform as well or better than 70% of the other companies in the comparison group. Conversely, you perform more poorly than 30% of the other companies in your comparison group.

The Opportunity Assessment contains three main sections. In the first section is a grid that identifies, for each transformation driver, the value you entered in the survey and in what percentile you're currently in. As you move across the grid, the model proposes an aggressive goal that varies based on your current position. The last columns allow you to, in collaboration with us, set targets that best align with your company's objectives and then calculates the financial impacts based on the targets you set.

In many circumstances, improvements better utilize existing resources, thereby freeing up capacity. The second section (containing the vertical bar graphs) illustrates growth potential if you accomplish your targets. This is the additional sales that could be sought, without adding resources, when you complete your improvements.

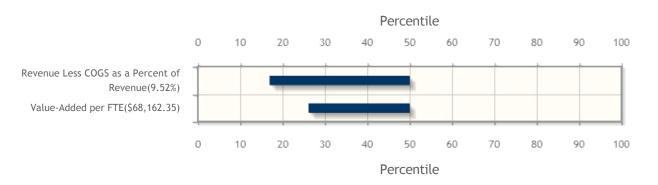
Finally, we illustrate what impacts your targets would have on your financial statements in a format consistent with most corporate financial statements.

Overall Impact

Analyzing your data for operational improvement opportunities, we've been able to identify a recurring annual impact of \$190,680.73. The type of annual benefits identified directly impact yearly profitability and would move your gross profit margin from 9.52% to 15.17%. By making these improvements, you can additionally free up \$319,918.74 in cash for use to make additional investments.

Performance Metrics

Performance Metrics



Performance Metrics Distribution Table

Performance Metrics Distribution Table

Percentile					
	25%	50%	75%	90%	Your value
Revenue Less COGS as a Percent of Revenue	6.78%	14.50%	21.24%	25.29%	9.52%
Value-Added per FTE	\$51,111.19	\$67,611.85	\$82,279.85	\$92,508.59	\$68,162.35

Metric Description

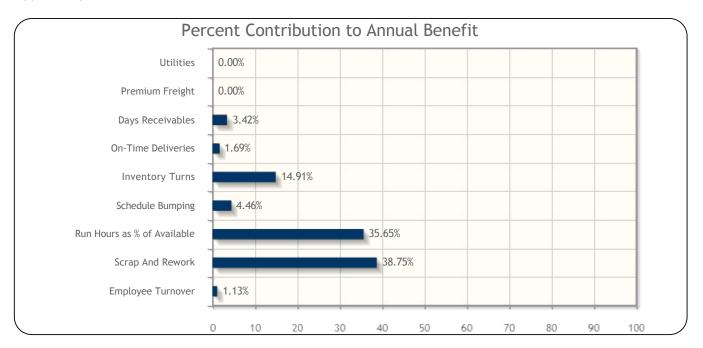
Revenue Less COGS as a Percent of Revenue	Sometimes called "Gross Margin," this metric captures what is left from revenue after subtracting manufacturing-related expense. It is the source of funds needed to cover Sales, General and Administration (SG&A) expenses, and for net profit. While higher Gross Margin is always preferable, locations with very little marketing and sales expense such as captive suppliers who sell to other branches of their own company might be fine with lower rankings on this metric. Companies with significant marketing and sales outlays, such as those making final products under their own brands, must score well on this metric or risk low profits.
Value-Added per FTE	People are the most valuable resource in any manufacturer. With the current skilled workforce shortage, the ability to leverage human capital more effectively is critical to long-term success and indicative of flexible and scalable operations. Because different manufacturers require different levels of indirect support in their operations (i.e. engineering, procurement, etc.), measuring value-added per full-time equivalent is a better way to measure overall productivity of labor across a peer group. In a high-wage economy, the only way to stay globally competitive over the long term is to keep improving on this fundamental measure of labor productivity.

Opportunity Impacts

	Current		Target				
Performance Metric	Value	Percentile	Value	Percentile	Annual Benefit	One-Time Cash Conv.	
Utilities	\$36,349.00	95.00 %	\$36,349.00	99.89 %	\$0.00	\$0.00	
Premium Freight	\$0.00	95.00 %	\$0.00	100.00 %	\$0.00	\$0.00	
Days Receivables	28.43	95.00 %	14.33	100.00 %	\$6,519.81	\$130,396.27	
On-Time Deliveries	95.00%	25.71 %	97.00%	42.86 %	\$3,214.73	\$0.00	
Inventory Turns	4.88	5.00 %	7.00	31.80 %	\$28,428.37	\$189,522.48	
Schedule Bumping	10.00%	41.18 %	5.00%	76.47 %	\$8,496.57	\$0.00	
Run Hours as % of Available	75.00%	60.00 %	85.00%	88.80 %	\$67,972.55	\$0.00	
Scrap And Rework	4.42%	5.00 %	2.00%	24.91 %	\$73,888.70	\$0.00	
Employee Turnover	5.00%	69.00 %	2.00%	85.47 %	\$2,160.00	\$0.00	
				Total:	\$190,680.73	\$319,918.74	

* - Not applicable to selected comparison group

Opportunity Contribution to Total Gains



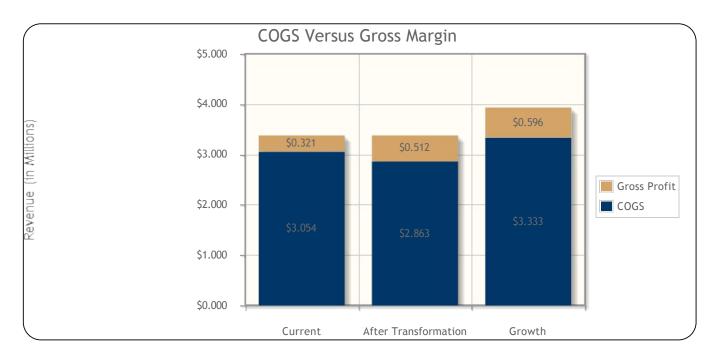
Sample Financials

Sample Financials after Transformation						
	Initial Evaluation	%	Target Objectives	%	Opportunity	
come Statement						
Annual Revenue	\$3,375,288.00		\$3,375,288.00			
Cost of Goods Sold	\$3,053,815.00		\$2,863,134.27			
Operating Margin	\$321,473.00	9.52%	\$512,153.73	15.17%	\$190,680.73	Annual Benefit
alance Sheet						
Average Inventory	\$626,072.00		\$436,549.53			
Receivables	\$262,911.00		\$132,514.73			
			Total:		\$319,918.74	One-Time Benef

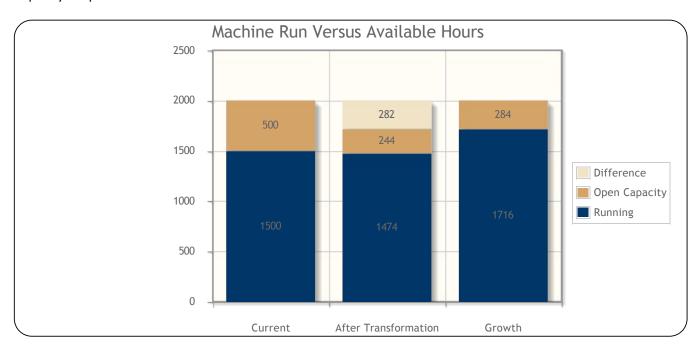
Filling Capacity Created by Transformation

Keeping your shop open 2000 hours per year and achieving the final targets for machine run time, scrap, rework and schedule bumping, your company could fulfill additional orders of: \$554,058.35

Growth Opportunity



Capacity Graphs



Values Provided

Values Provided	
	Percentile
Annual Revenue	\$3,375,288.00
Cost of Goods Sold (COGS)	\$3,053,815.00
Full Purchased Materials	\$1,694,364.00
Labor and Overhead	\$1,359,451.00
Gross Profit	\$321,473.00
Average Inventory	\$626,072.00
Purchased Non-Manufacturing Services	\$250,731.00
Energy Expenditures	\$30,896.65
Value-Added	\$1,363,247.00
Total Scrap (Labor and Materials)	\$59,965.00
Scrap - Materials Only	\$25,000.00
Rework	\$75,000.00
Total Scrap and Rework	\$134,965.00
Non-Reimbursed Premium Freight	\$0.00
Average Receivables	\$262,911.00
On-Time Deliveries	95.00%
Machine Hours Available per Year	2,000.00
Machine Hours Actually Running Parts per Year	1,500.00
Schedule Bumping	10.00%
Employee Turnover	5.00%
Average Number of Hourly (Non-Exempt) Employees	15.00
Average Number of Salary (Exempt) Employees	5.00
Average Number of Employees	20.00
Average Hourly (Non-Exempt) Work Week	40.00
Full Time Equivalents (FTEs)	20.00
Average Hourly Wage	\$15.00