



Key Performance Indicators

(The January 2004 edition of IW [IndustryWeek] includes two articles on manufacturing that include “key performance indicators”. One article is *TIES THAT BIND: IndustryWeekValue Chain Study reveals manufacturers’ struggle to add value from product development to delivery* (page 49). The second is *TICK TOCK IW/MPI Census of Manufacturers shows challenges, reality and, yes, even optimism* (page 20). Both articles are by David Drickmamer. Both articles are based on surveys and span a broad range of manufacturing industries. The results are typically presented in three categories: 1. Poor performance in the ‘Bottom 25%’, 2. Average performance as ‘Median’, and 3. Top performance in the ‘Top 25%’. The information below is an effort to keep you abreast of best practices in manufacturing and give you and opportunity to benchmark yourself. For the complete article, please obtain a copy of the January edition of IW.)

SUPPLY CHAIN PLANNING

<i>Key Performance Indicators</i>	<i>Bottom 25%</i>	<i>Median</i>	<i>Top 25%</i>
Cash-to-cash cycle time (days)	90	56	30
Total inventory turn rate	3.2	6.0	10.0
Production schedule attainment	77%	90%	97%
Cost of Quality (percent of annual revenues)	3.1%	0.7%	0.1%

NEW PRODUCT DEVELOPMENT

<i>Key Performance Indicators</i>	<i>Bottom 25%</i>	<i>Median</i>	<i>Top 25%</i>
Percent of sales from products launched previous year	10%	15%	25%
Time to market (days)	258	150	60
Products launched on budget	50%	75%	90%
Products launched on time	30%	60%	86%
Percent R&D cost for new products	3%	25%	50%



PROCUREMENT

<i>Key Performance Indicators</i>	<i>Bottom 25%</i>	<i>Median</i>	<i>Top 25%</i>
Supplier lead time (days)	28	14	7
On-time delivery	80%	90%	95%
Purchases from certified vendors (% of total spend)	40%	75%	90%
Direct materials sourced outside the U.S.	2%	10%	25%
Direct materials sourced outside U.S., Canada and Mexico	0%	5%	20%

CUSTOMER ORDER MANAGEMENT

<i>Key Performance Indicators</i>	<i>Bottom 25%</i>	<i>Median</i>	<i>Top 25%</i>
Percent of total sales orders that require no manual intervention	0.0%	0.0%	30.0%
Total annual sales orders placed with your site delivered on time	85.0%	93.0%	97.5%
Percent of your total annual sales orders not fulfilled due to stockouts	5.0%	2.0%	0.0%
Customer retention rate over the past three years	80.0%	90.0%	95.8%

LOGISTICS

<i>Key Performance Indicators</i>	<i>Bottom 25%</i>	<i>Median</i>	<i>Top 25%</i>
Customer order-to-delivery time (days)	14	7	3
Supplier delivery dock-to-stock cycle time (hours)	12	4	2
Customer order pick-to-ship cycle time (hours)	10	4	2
Order fill rate	90.3%	97.7%	99.0%
Total logistics costs as a percentage of sales	10%	4.3%	2.0%



MANUFACTURING

<i>Key Performance Indicators</i>	<i>Median</i>	<i>Top 25%</i>
Average wage for production employees (\$/hour)	\$13.00	\$15.50
Annual sales per employee	\$150,000	\$220,000
Raw material turns (COGS/Average raw material)	11.6	22.0
Work-in-Progress turns (COGS/Average value WIP)	16.0	38.2
Finished Goods Turns (COGS/Average Value Finished Goods)	12.0	25.0
Total Inventory Turns (COGS/Average Value of Total Inventory)	8.0	13.0
Asset Turn Ratio (COGS/Average Assets)	2.5	4.0
Return on Invested Capital	13.5	25.0