Three Unexpected KPIs that Drive Manufacturing Success

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Summary:
Looking for new ideas for tracking real progress at your company? Check out these three unexpected KPIs that drive manufacturing success.

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The classic joke goes something like this.

A police officer on her nightly rounds comes upon an inebriated man crawling underneath a corner streetlight. "Lost something?" the officer asks. "Can't find my house keys," the man slurs in response. Sympathetic, the officer joins the search. After a few fruitless minutes, she asks, "Are you sure you lost your keys on this corner?" "No," he answers. "Then why are you looking here?" the officer asks. The intoxicated gent favors her with a look of true exasperation.

"Because," he says, "This is where the light is!"

Before you laugh too hard at that old drunk, bear in mind that your manufacturing company may be doing something very similar. In both psychological and business circles it's a phenomenon known as "The Streetlight Effect"—an observational bias toward convenience that hampers one's ability to see accurately into a broader situation.

Bruce Ernst of Monetate describes it this way: "Most brands, unfortunately, are using data to see if their assumptions … are holding up instead of asking really important questions that may not be answerable using the data they already have. They are looking where the light is."

Of course, in the manufacturing industry, it's important to track the obvious indicators of success: Asset utilization, cycle time, labor usage, MTBF, on-time delivery, OEE, throughput and more. But are there unexpected KPIs "outside the light" that can also drive success at your company?

Let's find out.

KPI #1: Job-Integrated Access to Transparency Efforts

"Transparency is the default setting for our daily lives," says John Doerr, chair of venture capital firm, Kleiner Perkins. "It's the express lane to operating excellence. Yet at most companies today, goals remain secrets." Doerr sees this inability to communicate transparently with internal stakeholders as a major obstacle to corporate productivity.

The research backs him up. Consider:

Studies show that only 7% of workers "fully understand their company's business strategies and what's expected of them in order to help achieve the common goals."

In a recent survey of more 1,000 employed adults in America, 92% said they'd be "more motivated to reach their goals" if tracking toward individual progress were visible to everyone in the company.

A larger survey of 11,000 senior leaders in corporate America revealed that less than half could "name their company's top priorities," and barely 50% could identify even one of those priorities.

Time and again, research has demonstrated that "public goals are more likely to be attained than goals held in private."

It's no surprise, then, that companies employing transparent business practices gain a significant edge over their competitors. According to Doerr, this kind of transparency fosters collaboration, make everyone's goals visible, drives employee engagement, facilitates networking, and saves time, money, and frustration.

So, if we want to capitalize on the benefits of a transparent manufacturing operation, we need to be diligent to track our efforts toward this critical goal. As the saying goes, "What gets measured, gets managed." We cannot expect to manage our corporate transparency if we never take time to measure it.

Thankfully, measuring transparency efforts doesn't require the same level of drill-down capacity as other metrics like labor usage or OEE. Doing something as simple as quarterly checks on job-integrated access to a company's messaging outlets can quickly, and significantly, improve progress in corporate transparency.

Job-integrated access (JIA) looks at how effective a company's internal communication vehicles are at reaching employees in specific job functions. It assesses the level to which an information outlet (IO) is a natural part of a worker's hourly routine. To determine its rate, JIA measures integrated work hours (IWH) against total work hours (TWH). The formula for this is simple: JIA = IWH ÷ TWH.

For instance, suppose you're pursuing transparency through the IO of an Employee Resources page on your HR intranet. The JIA rate of that page for human resources staff would be very high, because those workers have natural interaction with the HR intranet throughout the course of a normal workday. Conversely, employees who spend their shifts primarily operating machinery on the factory floor wouldn't have routine interaction with that HR page. Thus, the JIA rate for those workers would be low.

Being able to see a low JIA rate for your floor workers would be invaluable when pursuing an ongoing policy of corporate transparency. It would immediately spotlight the need for a second IO that's more naturally accessible to them. That could prompt improved transparency measures on the factory floor such as installing electronic signage with regularly-updated messaging, or a "hamburger counter" that displays the latest corporate KPIs of relevance.

KPI #2: ESG Rating and Disclosure

ESG stands for "environmental, social, and governance." It's a benchmark rating model that investors use to make at-a-glance assessments of a business's performance in areas of corporate social responsibility. This would include factors such as carbon footprints, labor policies, BIPOC representation, and so on. Investors seek ESG ratings for ethical reasons, and also because high ESG performers often show a leadership proficiency for behaviors that transfer into drivers of value-increasing business outcomes.

George Serafeim, a professor of business administration at Harvard Business School, studied ESG factors of 3,000 companies at the height the COVID-driven economic collapse in 2020. He and his colleagues found that, as markets were tumbling worldwide, "The [companies] perceived as behaving more responsibly had less-negative stock returns than their competitors."

Additionally, Serafeim's related research has revealed a progressing trend in both equity and loan markets that links interest rates to a company's ESG performance. He also observes, "An ESG focus can help management reduce capital costs and improve a firm's valuation … As more investors look to put money into companies with stronger ESG performance, larger pools of capital will be available to those companies."

In the modern manufacturing enterprise, ESG is already incorporated into business practice. The problem is that, for many manufacturers, ESG is a hidden factor that's easily overlooked when discussing data transparency. The result is that outside agencies such as MCSI must sometimes assign ESG ratings with incomplete data. So, one effective strategy to improve in this area is to standardize and publicize ESG KPI tracking that goes on within your company.

First, take the KPIs you currently use to track your own ESG efforts and assign your company an internal, overall ESG score as a comparative metric against external ratings from outside agencies. Mimic the model used by MCSI as the basis for your KPI tracking, and you can begin to take control of your ESG reputation instead letting others define that for you.

Second, create an at-a-glance data dashboard that transparently exposes all your ESG KPIs as well as your internal, overall score. Publish that dashboard to your public website and internal intranet, with daily or weekly updates for all to see.

The management practice of formalizing and publicizing ESG KPI tracking in manufacturing is simple to implement.

When done well, this alone can have profound impact on brand reputation, access to investment capital, employee morale, and bottom-line profitability.

KPI #3: Near-Miss Analytics

Now we're going to talk about somebody behind his back, so let's call him Bob.

Good ol' Bob works at just about every manufacturing business in the nation. He's a machinist, well-liked by his peers, and always ready with a smile or a pat on the back. Bob's been working in manufacturing for nine years now, so he knows what he's doing, and he likes the work as well.

Last Tuesday Bob was a little distracted when the cuff of his shirt sleeve got caught in a drill presser. A quick-thinking co-worker shut off the machine and Bob was able to extract his sleeve with only a grease stain to show for the trouble. All's well that ends well, Bob thought, so he shrugged it off and went back to work.

And that was that, right? Well, no.

What happened to Bob is a "near miss," meaning "an unplanned incident that did not result in illness, injury, damage, or fatality." This is predictive event that Wayne Chaneski calls, a "lead measure," that points to future outcome. The president of Smart Manufacturing Solutions, Chaneski emphasizes, "Preventing accidents in the workplace starts with recognizing and reporting conditions that present the potential for them to happen."

That seems obvious—so why is this considered an "unexpected KPI" for manufacturing? There are two reasons. First, near-miss reporting isn't required by OSHA standards. Because of that, in the busy manufacturing environment, it's often overlooked—sometimes even deliberately hidden. Second, because it's so often left out (or avoided), near-miss reporting rarely makes it into executive-level decision-making. This means leaders miss the benefit of a directly-predictive analytic when charting the growth and profitability of their company.

According to the US Bureau of Labor Statistics, the United States averages 2.8 million nonfatal workplace injuries or illnesses each year, resulting in over 900,000 lost workdays, lower employee productivity overall, and higher bottom-line expenses. With advance warning of potential danger, a significant portion of those injuries (and lost workdays) are avoidable. That's what makes "near-miss" such a valuable, yet under-utilized, KPI for manufacturing.

Safety By Design reports that when a near-miss KPI is in place and visible, "Companies can be proactive instead of reactive regarding employee safety. Instead of waiting for a loss to happen, steps [can be] taken to ensure safety and prevent a potential incident." Team Safesite adds, "Regular reporting allows you to correct unsafe conditions and reduce costs associated with workplace injuries."

So, if you want data to drive the success of your manufacturing company, take your near-miss reporting out of the background and into transparent accountability. Consider adding a data dashboard that tracks four primary, almost-accident metrics: 1) number of near-miss incidents each month; 2) location(s) of near-misses; 3) cause of near misses (human, machine, circumstantial); 4) correlation to incidents with injury or illness.

As this near-miss data populates over time, it will allow you to make predictive assessments to determine what can be done to prevent future incidents, and whether those preventative efforts should focus on human training, work environment updates, machine repair or replacement, or other strategies.

Three Key Thoughts:

1. "Doing something as simple as quarterly checks on job-integrated access to a company's messaging outlets can quickly, and significantly, improve progress in corporate transparency."

2. "The management practice of formalizing and publicizing ESG KPI tracking in manufacturing are simple to implement. When done well, this alone can have profound impact on brand reputation, access to investment capital, employee morale, and bottom-line profitability."

3. "Because it's so often left out (or avoided), near-miss reporting rarely makes it into executive-level decision-making. This means leaders miss the benefit of a directly-predictive analytic when charting the growth and profitability of their company."

For Further Reading:

Manufacturing HQ

How The Manufacturing Industry Uses Analytics and Dashboards To Increase Profitability

Schedule a demo with a Blue Margin data expert

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