**Traditional Metrics that Need to be Replaced**

Obviously, some performance metrics are needed so that results of key activities can be measured. There should be a blend of real-time metrics, tactical metrics, and strategic metrics. There cannot be too many metrics for top management to review when appropriate. So picking the right ones is important.

Other than yesterday’s shipping total, most key metrics are reviewed monthly. One outcome of this is that 50% of all shipments happen in the last 5 days of the month. So, a simple question is, who decided that *monthly* is the appropriate time bucket? Everyone uses it, but why? Think of the activities a simple “follow what everyone else does” result in at your company over the last few days of every month. Its ridiculous. But almost everyone does it. Brinkmanship at its finest. Do your metrics encourage this?

**A Brief List of Metrics to Replace**

**Unit Cost** – often carried out to 4 decimal places, there are so many opportunities to have different costs because of the way accounting rules can be applied. But unit cost is accepted as completely accurate. If you presented financial statements to 30 different people to come up with unit costs, you would have 30 different answers that vary by up to 70%. A focus on unit cost drives behavior in the business that is contrary to lean production methods. Unit cost is comprised of materials, outside service, “direct” labor and overhead. So each person tries to make their component as low as possible, thereby ignoring the entire outcome, which is usually an sub-optimal for the business.

**Purchase price variance** – rewards buying from unreliable suppliers because they are “cheaper.”

Gross margin – an outcome that relies on unit cost. Also, many companies will use make-buy decisions based on this – they make more money going to a supplier instead of making it themselves. But they ignore the fact that 50% of the costs in the margin calculation are fixed, so they need to be reapplied to other products. So, the prices of other products increase despite the fact that nothing about them changed.

**Overhead absorption** – makes fixed costs look variable and distorts decisions making.

**Machine utilization** – the use of this metric drives over-production and frequently results in the independent use of machines instead of the synchronous use. Synchronization is more important to reduce total production times.

**Labor utilization** – Same as machine utilization, except applied to people.

**Direct/Indirect labor** – most shop employees know the goal, so frequently they do not log out of jobs when they should (like on break or during lunch, looking for materials, etc.). So, it is highly misleading. Frequently, it is thought that indirect labor is bad. Indirect labor can be a powerful productivity tool as well because many times the rate for an indirect person is less than the skilled worker. So, if the indirect one indirect person can make a six highly skilled workers 20% more productive, why not hire them. But the paradigm is that “indirect labor” is bad…

**Machine rate per hour** – Most of the equipment that is purchased for the shop has a life of 10 years or more. But a five-year life is used because it simplifies the accountant’s life. Also, the expected available hours to be used annually is a shot in the dark and is frequently misleading, especially if it is based off of cost accounting information which bases machine hours off of whether a person is logged into a job or not. Which does not mean the machine is running.

The examples listed above are far short from being a comprehensive list. There are many other traditional performance metrics that are irrelevant or misleading.

**Metrics Characteristics**

One other thing to consider are the various characteristics of the metric itself. For example, should it be measured hourly, daily, weekly, monthly, quarterly? How is it calculated and what is the source of the data? Here is one example. I worked with a company that measured inventory turns on a weekly basis. The numbers were all over the place. One large receipt combined with a slow sales week could make the inventory turns number vary by 50%. Everyone using this metric realized it was meaningless, but they kept using it. Inventory turns is probably a quarterly metric at best for most of the printing companies that I have worked with.

What are the metrics you are using now? What behaviors do they encourage? Are they easily manipulated? Are they too myopic? Why were they selected in the first place? What compensating metric should be used to offset the metric (like speed and quality). Put together a matrix that answers these questions for each of your key metrics and decide whether they are truly beneficial for your company or not.

*The next article will present some alternative metrics that can replace the metrics listed above.*

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**About the Author:** Bob Krausert is the owner of STRATE***X***, a Twin Cities based firm that works nationwide. Bob is the author of the book, ***Extreme Lean***, published in 2018. Bob has worked with over 60 printing companies, mostly mid-sized companies, but also with larger companies like Jostens and Banta, now part of RR Donnelly. During his career, Bob has trained over 12,000 people at both public and private events. Bob has been working with PIM since 2010, periodically providing educational seminars for its members. Bob can be reached at [stratexlean20@gmail.com](mailto:stratexlean20@gmail.com) or by phone at 612-743-8706. If you would like to have a specific question or topic covered in one of the articles, feel free to make the suggestion!