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MEASURING SUSTAINABLE CHANGE

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The Perspective

Many times, business professionals have been involved in changes to processes or systems where they have relied on seat of the pants knowledge to determine whether or not they were successful. More often than not, the initiative flounders once their attention has been turned to the new “flavor of the month” and its back to business as usual..

There has been a great deal of debate over the years revolving around how a business or, more importantly, a specific business processes should and should not be measured. The theories vary far and wide, but in essence, most of the debate is centered on how to measure both the current status and ultimately, the end result. Should it be measured on cost per unit output, on cost as a percent of asset replacement value, on production costs, etcetera, and etcetera. The debate continues to rage, but we contend that the debate is focused on the wrong timeframe and perhaps the wrong parameters. All of these measurements, as stated, concern themselves with “outcomes”, or after the fact measurements of changing variables.

Times have changed significantly and there are four primary reasons why new performance measures are required:

- Traditional accounting and measures are no longer relevant to a company moving toward a world class operating environment, although they portray a certain reality
- Customers are requiring higher standards; competition has increased, which in turn requires metrics that relate how well the organization is meeting those standards in relation to the competition
- Management techniques, technology and reporting mechanisms used in plants have changed significantly
- Behavior change is now recognized as a key contributor to the success of any process initiative

Leading vs. Lagging Indicators

The most compelling reason for the need for a change in approach is that the measures stated previously are based on lagging or outcome indicators. These are after the fact results, unchangeable once the time period of measurement has been completed. Many decisions are now pushed down to the floor level, and for those individuals, and for this level of focus; we find the old high level outcome measures inadequate. We desire measures that are meaningful to the entire organizational hierarchy. We can then use those measures, and others to monitor and promote particular behaviors by our employees. Using outcome indicators is like looking out the back window of a car to see where you’ve gone.

Today’s environment requires measurements that can predict, determine, and influence desired outcomes. We need to be able to affect the final outcomes for whatever period we are measuring by developing and monitoring interim indicators.

Managing the trends of the leading indicators is our view of successfully managing your investment in high performance business processes. So the premise is to measure both leading and lagging indicators; but it must be done in some context, some overall process that integrates tactical with your strategic direction. We call such a process the “Managing System.” This forms the basis for integrating people and processes within a common framework. The “Managing System” is the umbrella process used to guide the organization on a day-to-day basis and is considered a foundational process. The managing system integrates the overall operational strategy for the assets to a series of cascaded goals and objectives that are linked down through the organization. It is then used to establish the measurements of these goals at each level, and the key process indicators needed to ensure that the processes remain healthy. These measures are a mixed set of the proper leading and lagging indicators.

This is the mechanics of setting the system up; the key is in utilizing the system. The system is used as the primary vehicle to review how well we are performing against what we said we would do. It’s the “Plan, Do, Review, Improve” model made popular by Dr. W. Edwards Deming in the 1950’s. To make this work, it should be applied to all levels of the organization. Reviews should be held on a scheduled frequency. Results should be published and with

frequency. Finally, personnel should feel responsible and held accountable for end results.

Using a well thought out mix of leading (process) and lagging (results) indicators produce the best results. We review the leading indicators on a weekly basis. We now should have the ability and time to correct deviations from expectations. By the time we review lagging indicators at the end of the month we should be in good shape.

As we assess industrial operations, we see a semblance of this system in place, but it's often disjointed and based on results indicators that do not tie the strategic direction to tactics used at the floor level. In most cases, the measurements used are inappropriate for the process or business. Process indicators are often not employed, or if they are, not fully understood. Furthermore these indicators don't relate to the behaviors that you want to produce; so they don't provide a vehicle for change management.

It's important to measure, we all know that, but it's imperative to measure the right things! Business measurements are a part of a global set of indicators that gauge your business's viability. So it is important to ensure that we measure the right sets of information.

What's Missing?

The fact is results measures reflect the end results of what people are doing at the front end of the process. For example, there really is no such thing as productivity without acknowledging that people are doing the work. Productivity is the amount of output per unit of input (labor, equipment, and capital). There are many different ways of measuring productivity. For example, in a factory productivity might be measured based on the number of hours it takes to produce a good, while in the service sector productivity might be measured based on the revenue generated by an employee divided by his/her salary. Understanding the work process, committing to it, and continually looking for ways and techniques to maximize output are all behaviors.

Most of us don't tend to think of metrics this way. In fact, the way we label results takes the people out of the equation. Well, with one major exception, reprimands upon failure to meet targets. For us to truly manage a process we have to place people and their behavior back into the equation. We must conceptualize a managing system that includes people's behavior.

Are Performance Indicators the Answer – Why Not?

If indicators were taken and used in the spirit for which they were created, that would be one thing. However, human beings have a natural aversion to being measured and held accountable for performance. No matter how well intentioned the indicators that we've set up are, the people on the floor level will find a way to circumvent them. In fact, we have found clients that we've worked with to be quite ingenious when it comes to finding ways to "beat the system." So while these indicators track the apparent

success of the process, they don't tell the whole story. The key to achieving results and sustaining the process is to combine process indicators with behavioral indicators.

We have found it extremely beneficial to focus on behaviors as part of any initiative, no matter the business or industry. In the past we used to talk about "Best Practices" we now talk specifically about "Best Behaviors." With any initiative, we often spend a great deal of time identifying those indicators that will give us reassurance that the process is working. If we're really on the ball, we'll not only develop results indicators, but also process indicators. Tied into other systems these provide quantitative evidence of success or lack thereof. What happens when the pressure is reduced i.e., consultants or external help goes away? Often organizations revert to the old and comfortable ways, or we find that the quantitative evidence has been creatively dealt with and results aren't what we think or wish. We call this phenomena "Organizational Hysteresis" or the tendency of an organization to revert back to its former shape. You know, business as usual.

We have discovered that it is not enough to just manage the numbers. What is of the most value is that along with developing the process is to develop a list of behaviors we want the organization to exhibit. Then develop behavioral metrics that are aligned with the desired behaviors. After process installation, or hard wiring, we then program the organization by coaching and facilitating to those desired behaviors and then provide qualitative measures.

Don't Panic – Quantitative Measures are Still Useful

Various attempts at measuring organizational performance at different points of process are well known. There are outcome measures, cost/benefit analysis, and continuous performance parameters, but to measure change in behavior and individual change in performance, and beliefs; qualitative measures have extensive value. Much of traditional measurement has been based on quantitative measures, and there is history of value for those kinds of measures among technical managers and engineers. There is a desire for the "hard numbers" and "show me the numbers" information. Unfortunately, there aren't hard numbers or statistical processes that are effective in tracking behavioral change. There is a dilemma in using "self report" data to evaluate the effectiveness of outcomes in behavioral change. Therefore, it is wise to use qualitative measures to assess to what degree people are doing the required behavior. This means answering or observing, none of the time, some of the time, most of the time, and all of the time reports or assessments. This must also be correlated with actual change in outcome. Therefore, the qualitative measures must be interpolated with the hard number outcome measures (bottom line numbers, profitability, cost/benefit). Therefore there has to be intelligent analysis and integration of both kinds of measures.

How Do You Establish Best Behaviors?

The human psyche is broken down into three main elements for the sake of Change Management. Changing beliefs, knowledge and vision is the intellectual or cognitive component. Changing what is done, how it is done, and what is gained is the behavior component. How we respond to the success, failure or stress of the endeavor is the emotional aspect and not one to be ignored. All three elements are interdependent.

Assessment of current behaviors and beliefs is important to establish when doing baseline “as is” metrics and indicators. An example of this is the typical belief that “we are heroes if we drop everything or do whatever we can to correct a problem.” In a reactive business environment this is the norm. There is a rush or sense of pride and accomplishment. “See how quickly we responded and got the show back on line.” Or, “We get the job done, no matter what.” These beliefs are often reinforced by an informal reward system, promotions, pats on the back, etcetera.

In most business process improvements, our desire is to change the reactive belief to one that stresses zero defects and a planned, measured, predictable approach to our work. This leads to more profitability for the company, paying off for the individual by maintaining employment, providing a different level of satisfaction, and removing the chaos from the day. The new belief is one that states, responding to emergencies means that the process has failed, and that if not identified, addressed and corrected could lead to the demise of the company.

Interviewing all levels of the workforce to find their beliefs and how they go about their jobs is important for establishing baselines. This is used to identify how the organization has moved, once the process improvement begins. It also starts the sense of buy-in, as you are asking for employees for their information. But you must honor that contribution. This information can also be used to establish scorecard “red light” behaviors.

It is extremely important that prior to commencing any installation or implementation activities that the new desired behaviors are identified. Can you think of some? Well, here are a few I can think of:

- People attend planning meetings and are prepared to make decisions
- A worker knows, with certainty what he or she will be working on or expected to accomplish during the next week or day
- A worker is confident that he or she will be allowed to perform that identified activity
- Leaders practice open and honest communications
- Key Performance Indicators are understood and the indication of a negative trend is an opportunity to learn
- Reactivity is not rewarded
- Feedback is honored and encouraged

And the list goes on.

Determining the desired proactive behaviors and beliefs becomes the basis for the new process. Behavioral observations and self reports of sometimes doing things the “new way” but occasionally reverting to the old behaviors signal the need for intervention (coaching). It is important to praise this transition phase and refrain from focusing on “not good or fast enough” to encourage continuation to desired and expected behaviors and beliefs. Reward and reinforcement create the desired behavioral change. Punishment only causes resentment and resistive behavior.

Why Behavior Focus is the Key

Modified and new behaviors are the key to any change initiative. Towards the end of a previous engagement, we were asked by the client for a way to measure the success of the engagement. The immediate and obvious answer was, “We have met all of the targets.” We were then challenged to assure this client that once left alone the process would continue and not revert to the past, what we refer to as sustainability. Recall “Organizational Hysteresis?” This caused us to pause for a moment and think about what would be a prime indicator of continued progress. Well, we had the metrics and the behavioral tool, but they were measured differently. Metrics were measured quantitatively while the behaviors were measured qualitatively. In the end we came up with the idea that a combination of both would provide an ideal vehicle to Certify the organization “competent”, or “sustaining” for the process that was being modified. We would measure them on two axes; performance and behavior. Using a normalized scoring methodology we were then able to rate the organization on a 0 to 6 scale.

At the conclusion of an engagement we can certify an organization to both the performance metrics and the behavioral metrics. One cannot achieve sustainability without strong evidence of the presence of both elements. Simply set forth, we measure the client against normalized assessment points for both performance and behavior. We then grade or graph against two axes and if the client passes a set point that was initially agreed upon by the client then we can declare the organization at either a competent, sustainable, or high performing category (Figure 1). It isn't quite important at this point that we worry about the three grades. What is important is that the questions are dependent upon the process chosen, and are used to evaluate performance (quantitative) and behaviors (qualitative). They can be used at the front end for baseline determination and at the back end for a measure of organization movement.

Without going into the boring details, the Certification tool has ended up being a tremendous Change management tool. In one organization, the leading business unit demanded to be “Certified.” All of the scorecards were green and all of the behavioral metrics (as measured by the business unit, not independently) were on track (meeting all established targets for performance). For the certification activity we used

business unit personnel and consultants. The consultants took the lead position and lo and behold, the business unit, much to everyone's chagrin, did not pass. Why? It was the fact that the observed behaviors of the individuals at both craft and management levels did not support the process or engage in the targeted new behaviors. After much soul searching, the manager in charge participated in determining the path forward and corrective actions. Three months later they tried it again, and passed. What we discovered was the Certification process became a tremendous focusing tool for the organization. It made them go back and reflect on those desired behaviors and galvanized them to get it right the next time. At the time we recognized that we had uncovered a way to let an organization measure their realistic chances for achieving sustainability.

visualization of the change from the "as is" to the desired. These are the beliefs and behaviors that will ensure that the process is firmly in place and will be sustainable. You can actually see it!

This approach works for any environment; manufacturing, services, heavy industry and all aspects of the business. Not only are the workers on the shop floor evaluated, but we also look at all levels of the organization. A sample of areas evaluated for behaviors and beliefs are as follows:

- Meetings
- Leadership
- Environment for Change
- Moving from the Old Beliefs to the New Beliefs
- Best Behaviors by Function
- Desired Process Behaviors
- Information Management/Systems

As you can see, no one is immune from scrutiny. No required process or system is above suspicion. The list and required behaviors can be adjusted and modified to support the Organizational Culture and the process involved. After all seeing is believing!

Sustainability –what causes it?

As you remember, we propose that Organizational Change involves changes in the cognitive capabilities (the intellectual domain) of individual workers. This would be considered education. Additionally, we are talking about establishing new behaviors to achieve the desired outcome. This would be considered putting the education to work to replace outmoded behaviors, in the workplace.

It has been proposed that going through the grueling emotional process of changing comfortable behaviors to new uncomfortable behaviors, is the glue of sustainability. Participating with, and coaching individuals attending to their emotional process hasn't been considered too important in the past. We believe it shouldn't be neglected.

One has to give up an old, no longer desired behavior. This causes loss, aggravation and uncertainty. There is a grieving process necessary for any change. This implies that there is a transition in time from the old behavior to the new one. Measuring qualitatively where the worker is from red, through yellow, to green; tracks emotional changes as well as the amount of new desired behavior that is occurring.

For example, the reactive behavior, first measured as red is comfortable. When the employee measures themselves as yellow, they are doing the new behavior some of the time, and struggling with doing it all of the time. Emotions generated during this period are frustration, pessimism, and fears of incompetence. Coaching to overcome the threats to change is important at this time, to avoid the previously mentioned hysteresis, reverting back to old behavior.

To move into green, world class behaviors, the employee

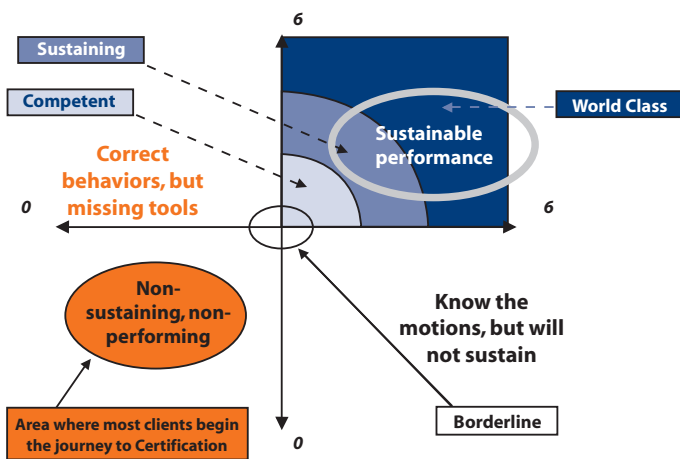


Figure 1: Sustainability Map

Thus, from outward appearances, one might assume that the process is firmly in place and sustaining. This is especially true with early performance gains. However, without these requisite behaviors, starting at the very highest levels of the organization, firmly in place, one can expect a return to the status quo, once the training wheels have been removed. What we have discovered since is even more powerful.

Measure from the beginning

Initially it was conceived that measuring the desired set of beliefs and behaviors required at the end of an engagement made the most sense. However, once a standard set of behaviors was established along with the associated measurement system, we started evaluating the behaviors at the beginning of an engagement. Although it should have been intuitively obvious to the most casual observer, a remarkable thing happened. The client knew what to expect, from the very beginning. Adjustments would be made to agree with the associated process as it migrated during implementation phases. However, interestingly enough, by measuring from the very beginning everyone could see the changes in behaviors. It is amazing, as there is now a

must do the behavior virtually all of the time. This would be classified as high performing. Yet, the new behavior can't be considered sustainable until it is comfortable. Beware of measurements of green, when the new behavior has just been attained all of the time. Just because someone is doing the new behavior all of the time doesn't mean they can sustain it. Emotional comfort, ownership, feelings of mastery, and pride in the new behavior cements it in place. Therefore, it is important to monitor how the employee feels about what they are now doing. It is also important to encourage, and reinforce this new high performing behavior to elicit these strong positive emotions.

In closing, sustainability isn't so elusive. Attention must be given to establishing a new behavior, teaching the new behavior, coaching the new behavior in the workplace, and rewarding the achievement of that new behavior. This implies that time is required to complete the entire process, rather than the simplistic notion that new behavior will just be "installed". Qualitative behavior measurement tools can track acquisition of sustainable behavior and change in the workplace.