

# Evaluating Continuous Improvement Effectiveness with the 20 Keys®

A Proven Process for Benchmarking Your Efforts

---

A Kaufman Global White Paper

Kaufman Global  
Tele: +1 317 818 2430  
[www.kaufmanglobal.com](http://www.kaufmanglobal.com)

**KaufmanGlobal®**  
ACCELERATING PERFORMANCE

## Introduction

The number of organizations NOT engaged in some form of Continuous Improvement (CI) activity in this day and age is dwindling fast. The vast majority of the private — and now public — sector organizations are leveraging Lean, Six Sigma and / or other CI methods to enhance operations and, ultimately, financial results in one form or another. While a great deal of time, money and resources are regularly invested to embrace these practices, the level of interest or attention to detail often dissolves once the initial implementation is underway or thought to be complete. This behavior leads to missing big opportunities that improve business outcomes.

To avoid this downward slope, key questions must be addressed, such as:

- Are CI activities being measured consistently?
- Have the results generated been quantified?
- Is there plan in place to ensure improvements are sustained?

If the primary answer is no, long-term success is unlikely. Whether operational improvement efforts are mature or just starting out, metrics need to be in place to define results and enforce accountability in order to drive the highest possible return on investment.

There are a number of common symptoms that prohibit sustainable execution and consistent progress from CI activities. A few examples include:

- **Lack of Responsibility and Accountability:** There is often a misconception that CI efforts are the “job” solely of the designated resources (e.g., Lean, Six Sigma, Operational Excellence, etc.), rather than improvements being driven continuously by the people working within the processes.
- **Leadership Change:** CI progress can often ebb and flow as leadership changes occur. It doesn’t take long to quell process improvements if a new, unenlightened leader appears who does not support and embrace CI activities. If the existing leadership governance of CI isn’t

strong, years of gain can slow down or may even digress. Backward movement is indicated when “projects” that are mostly reactionary become more prevalent. For instance, when a customer calls with a serious quality complaint or a long-term contract is suddenly lost to a competitor.

- **No Benchmarking Process:** Many organizations have few or no benchmarking processes in place to measure progress. While activities are taking place, there is often no consistent means for tracking success or failure throughout each of its locations.
- **Inconsistent Reporting Structure:** Organizations often have no binding guidelines or standards for reporting the gains derived from CI activities. Some locations report outstanding — and most times inflated — financial results, while others take much more conservative approaches. Without a systematic guideline in place (and enforced), it becomes extremely difficult to fairly compare one location to another.

If any of the situations noted above are familiar to you, read on. This white paper outlines a structured process to gauge a location’s CI effectiveness by leveraging Kaufman Global’s 20 Keys®, a benchmarking tool that provides a direct and consistent technique for tracking and evaluating progress. Established with flexibility in mind, 20 Keys can be repeated across all locations, addresses all functions, and is applicable to all industries.

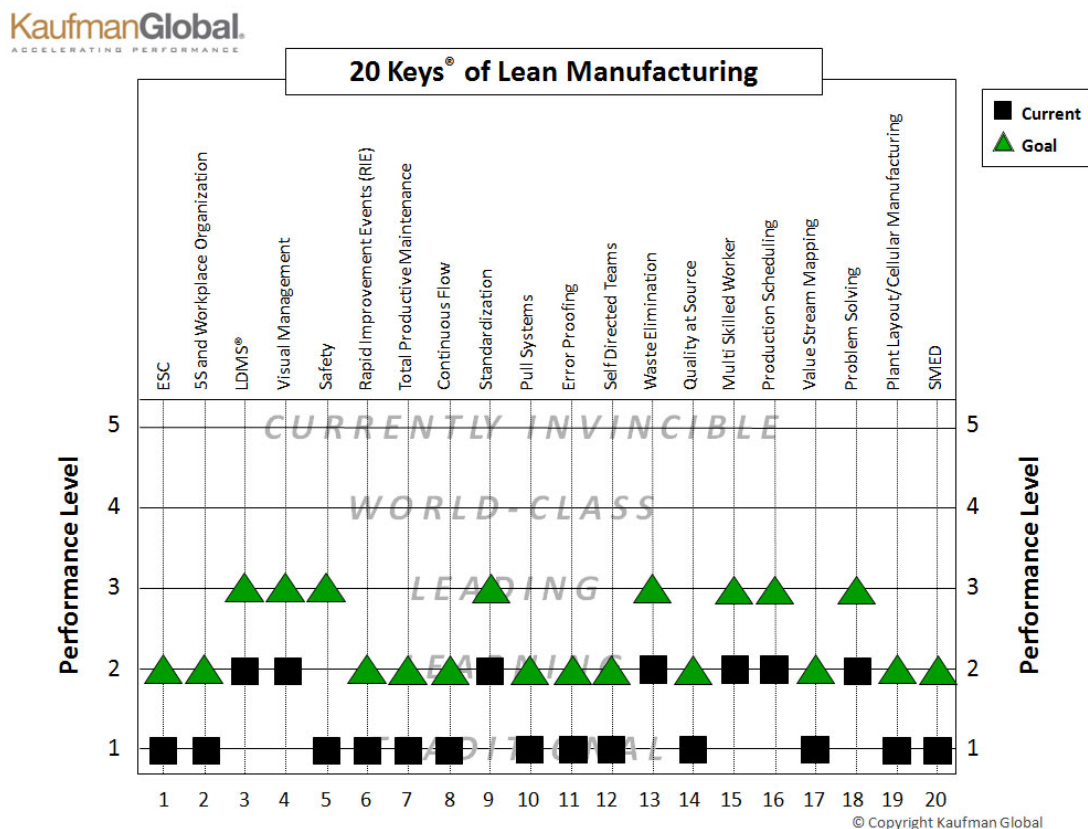
## A 20 Keys® Assessment

Kaufman Global’s 20 Keys is a CI mechanism that combines intuitive world-class benchmarks with the means for measuring and scoring group performance. The original set of 20 Keys is based on Iwao Kobayashi’s “20 Keys to Workplace Improvement<sup>1</sup>,” and was later expanded by Kaufman Global to cover a wide range of industries and disciplines. It now provides a standardized way for organizations to measure performance, right down to the workgroup level.

Quite simply, the 20 Keys enables organizations to grade themselves against key benchmarks, and to

then select specific areas of focused improvement. This can be done at all levels of an organization and provides a common metric for multiple locations to use. As an example, **Figure 1** below shows the 20 Keys® of Lean Manufacturing.

criteria. Once the assessment is done, this same group decides on which key(s) they should focus on improving. The objective is for the workgroup to increase their overall score by 10 points per year.



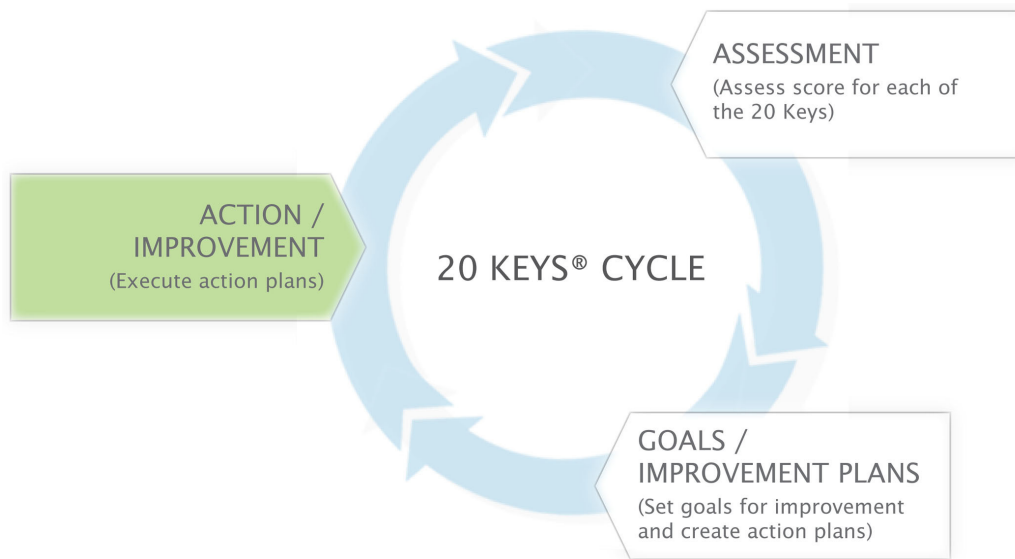
**Figure 1 - The 20 Keys of Lean Manufacturing** focuses workgroup attention on the 20 most important elements of Manufacturing — enabling the organization to compare its performance against world-class (or better) standards. The method provides an assessment of current status, future performance goals and a month-to-month plan for improvement.

You can see from **Figure 1** that the maximum score is 100 and the minimum score is 20 (from 1 to 5 points per key x 20). The current score shown by the black boxes in Figure 1 is 27. This is a typical score for a workgroup just starting out.

The 20 Keys are applied in an on-going cycle as shown in **Figure 2**. It is typically repeated four times per year, during which the site leadership team or representative works with the workgroup members to assess their score for each of the 20 keys. This is an honest, direct exchange in which the workgroup's score at each key is determined against known

Once keys have been selected and goals are set for improvement, the workgroup creates an action plan of things to do that will enable them to meet the higher criteria for each key. For example, if a workgroup has a poorly laid out and disorganized workplace, that group may devote resources (e.g., time, money, etc.) to improving their score on a 5S or *Workplace Organization* key. It is up to both the workgroup and leadership team to decide where improvement efforts will provide the best return for the effort.

The 20 Keys is not limited to manufacturing environments, it is a universal process. Implemented



**Figure 2 - The 20 Keys® Cycle** takes intact workgroups through the process of establishing a baseline (assessment), determining priority areas for improvement and then executing against an action plan to obtain the desired results. An iterative process, teams work on a few keys at a time and then start the process over again when new focus areas are determined.

within numerous client environments worldwide. Kaufman Global has developed more than 25 different sets of keys applicable to both industry and functional applications, a cross-section of which include:

- Customer Service
- Marketing
- Engineering
- Project Management
- Logistics and Supply Chain Management
- Sales and Operations Planning

The 20 Keys, regardless of the set you use, provides a quantitative way for each level of an organization to grade itself against known criteria. Implementing the 20 keys starts with an initial assessment that can be done at any level of the organization.

### **The Six Fundamental Keys to Measure**

Despite having a wide selection of key sets to choose from, there are six common keys applicable to all industries, functions and sectors (even government). These provide the basis for measuring the effectiveness of CI activities and supporting culture change within an organization. The six

common keys are *Safety, Leadership Engagement and Vision, Understanding Value Streams, Employee (Talent) Engagement, Key Performance Indicators (KPIs), and Business Results.*

These six keys can be found in some form within each of the various sets, providing the core of what can be evaluated during a CI Effectiveness Audit. However, if a particular location or organization has a known business problem or area to improve, supplemental keys can be added to the core six. For example, if an operation is struggling with high parts inventory and supply chain issues, keys can be taken from the *Logistics and Supply Chain Management* set. Or, if a state government is having problems with responding to a client's needs or determining financial eligibility for services, keys can be taken from those developed for government applications.

### **Safety**

Every organization wants to consider themselves world-class when it comes to keeping people safe. However, the actual operating culture may fall short. Think you have a fairly safe work environment? Consider the following questions:

- Does the organization have a weekly audit?
- Does the organization allow each workgroup to self-police themselves on eliminating unsafe behaviors?
- Do employees working within various operations actively strive to eliminate hazardous conditions?
- Are there processes and standard work procedures available that address the elimination of unsafe behaviors first and foremost?

If you can honestly answer “yes” to each of these questions, you are well on your way. If not, your organization could be at risk.

### Leadership Engagement and Vision

Any methodology for improvement, whether it’s Lean, Six Sigma, or Quality First, requires an overriding vision for it to be successful. Often times, corporate initiatives are directed, but have no governance to back it up. This leads to inconsistency in application of CI tools and methods, resulting in minimal improvement. The *Leadership Engagement and Vision* key measures how well an organization’s leadership has developed and communicated its vision, and how well they support

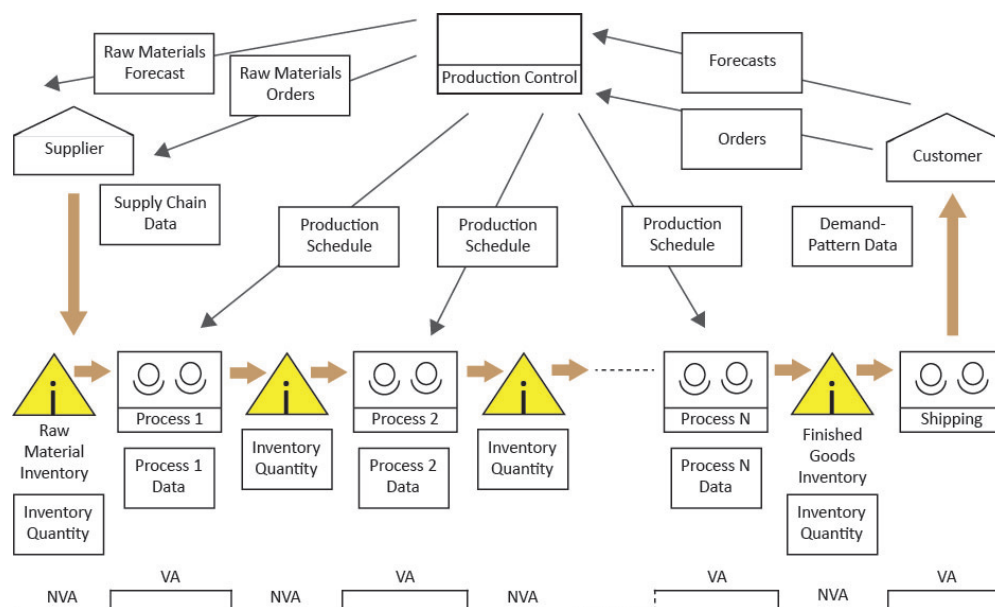
it. Essentially, the key provides answers and context to the following questions.

- Do various leaders act as sponsors for CI activities?
- Do their employees know what the goals and objectives of those activities are?
- Do they remove barriers to improvement?
- Does leadership meet regularly to focus on improving the business in a methodical way?

Improvement initiatives often fail due to a simple lack of communication. Executives often wonder why they saw so little benefit from an initiative after some early gains. However, when pressed, executives often admit to allowing their own focus to wander away from improving the business and falling back into more traditional, reactionary forms of leadership.

### Understanding Value Streams

Understanding of an organization’s value streams, and the improvement opportunities within them, is a fundamental requirement for any CI activity. If process improvements don’t affect the overall value stream of a product or service, then why bother?



**Figure 3 - A Value Stream Map** focuses on locating and assessing hands-on work time (i.e., cycle time) and waiting (i.e., lead) time, as well as other elements of interest. The process typically involves the development of a current state value stream, a future state value stream design, and an action plan to begin moving from the current to the future state. Such mapping activities focus on removing barriers and waste between processes to achieve system-wide continuous flow.

The *Understanding Value Streams* key evaluates an organization's understanding of this critical component. Levels are based on the percentage of value stream maps (VSMs) the site has completed, and how they have worked to improve them.

Value stream maps (see **Figure 3**) provide a comprehensive view of how a product or service is produced from the time the supplier ships materials through customer delivery. Data points collected in constructing the map includes work in process (WIP), cycle time, set-up time, quality of the output, and personnel required. Collecting and analyzing this data enables problem areas and bottlenecks to be identified more easily. This "big picture" view of the business also provides a clear understanding of how each major process affects the next.

### **Employee (Talent) Engagement**

Which members of an organization know the most about any given process? Is it the Vice President, Site Manager, Supervisors, Quality Assurance Manager, or the people operating within the process? Of course, the answer is the personnel who operate within the process every day. In most cases, this group also has the best ideas on how to improve it. After all, involvement breeds commitment. A world-class organization recognizes this and engages ALL their employees in CI activities. This engagement is accomplished by identifying a clear vision, communicating that vision, and regularly exhibiting it through correct leadership behaviors.

CI participation should be fundamental and considered part of everyone's job. The *Employee (Talent) Engagement* key measures to what extent the whole organization is involved in CI activities.

### **Key Performance Indicators (KPIs)**

The KPI key measures the level at which an organization leverages data to track and improve performance, answering the following questions:

- Does the organization make decisions driven by data, or are they based on the intuition of a single Supervisor or Manager?

- How do people capture and use data?
- Does the organization allow personnel at the workgroup level to capture and act on data that is important to them and their performance?

### **Business Results**

All CI activities should be focused on reaching a specific business result. It's not uncommon to see organizations embrace CI, train personnel or hold multiple improvement events without clear expectations on what type of end result they are striving for. After an exhaustive initial effort, they often wonder, *what did we get from all that effort?* For larger, multi-site organizations, this problem is often exacerbated by inconsistent reporting from one location to the next. The *Business Results* key provides a means for ensuring benefits are tracked consistently across an organization.

It also works to align leadership and CI staff, helping to guide the selection and resourcing activities associated with CI initiatives. Being that the goal of a significant business result is at the forefront of everyone's mind, the key prioritizes projects based on their level of return to the bottom line. Sounds straight forward right?

In the midst of an unsuccessful CI initiative, CI Staff often make comments like, "Leadership shows no interest in the projects we are doing. It is so frustrating." In tandem, leadership often complains that, "We are not seeing any benefit. Neither our productivity or quality has improved." When drilling down to the cause of these instances, it is often discovered that CI staff were assigned to tackle a challenge with little or no business case to back it up. As a result, good improvements may have been made, but few impacted productivity or quality. So, who's to blame? Both groups are.

Leadership's responsibility is to set goals and expectations for the CI staff. At the same time, CI staff is responsible for leveraging their technical expertise to identify the organization's pain points and make improvements that will have the most significant impact.



## Using 20 Keys to Evaluate CI Effectiveness

The six keys outlined above constitute the core of evaluating an organization's CI culture and effectiveness. Doing so is a defined process with specific activities outlined below. As mentioned in the introduction, CI focus can be lost due to a number of factors. A site review with an experienced professional, using this proven methodology, can point out where this focus has been lost and provide insight into how to correct it.

## How It Works

A comprehensive review of a site's CI effectiveness takes time, structure and focus. It's not simply a review of the projects a site has completed, or just a review of how much training has been done. While these are some of the important elements, they

alone do not give a clear picture of an organization's CI health. To fully evaluate effectiveness, five main activities must occur:

1. Value Stream Tour / Review
2. Key Performance Indicator Review
3. Review of Business Results
4. Focus Interviews with all Levels of the Organization
5. 20 Keys Scoring (with Site Leadership and CI staff)

The time required for a site review varies based on size, number of employees and major value streams. **Table 1** below is based on a moderately sized plant with three main product lines. This basic schedule covers all required elements.

**Table 1** - A typical **Site Review Schedule** is identified below that covers all required elements. It can be tailored to meet the needs of an individual site.

	Monday	Tuesday	Wednesday	Thursday	Friday
AM		Value Stream Review / Walk Metrics	Value Stream Review / Walk Metrics	Focus Interviews	Evaluation Report-out Review / Walk
PM	Leadership Brief – Objectives of week Begin Improvement Project Review Site Tour / Initial Observations	Value Stream Review / Walk Metrics	Focus Interviews Support Functions	Financial Analysis Report-out Prep 20 Keys Scoring	

## Conclusion

CI activities improve processes up and down the value stream and work to change the culture of organizations. When managed comprehensively, organizations are empowered to dissect processes, identify non-value-added activities, leverage data analytics, and, ultimately, drive improvements.

How many organizations apply these principles to CI activities themselves? No matter how good your CI staff is, organizations can benefit from a structured review of their CI effectiveness. For best results, consider an experienced set of eyes from outside the organization to identify opportunities internal staff may be overlooking due to being too involved with day-to-day activities.

## End Notes

<sup>1</sup> Kobayashi, Iwao (1995). *20 Keys to Workplace Improvement*. Productivity Press.

## About Kaufman Global

Kaufman Global is a proven implementation partner that focuses on accelerating performance. For 20 years we have worked with clients around the world to drive enterprise-wide change initiatives and cultural transformations. Leveraging Lean, Six Sigma and proprietary change management techniques, Kaufman Global delivers structured implementation and transformation projects that enable sustainable operational and financial results.

Visit us on the web at [www.kaufmanglobal.com](http://www.kaufmanglobal.com).

©Copyright Kaufman Global. All rights reserved.

This document is provided for information purposes only and is the property of Kaufman Global. It may be reproduced or disclosed in whole, without modification, for your personal use (but not for resale) with all copyright and trademark attributions included.

20 Keys®, Lean Daily Management System®, LDMS®, Lean Leadership®, SLIM-IT®, WIn-Lean®, and the Kaufman Global logo are registered trademarks of Kaufman Global. Other company, product or service names may be trademarks or service marks of others.

Questions regarding appropriate usage and attribution of Kaufman Global materials, copyrights and trademarks may be sent to [marketing@kaufmanglobal.com](mailto:marketing@kaufmanglobal.com).