# Visual Controls / Cycle Tracking

**Date:**

**Location:**

**Shift:**

### Intent

Visual controls should do at least one of two things:

- Reflect the actual vs. expected pace or progression of work (admin, support or line processes)
- Capture delays, interruptions, and frustrations that arise doing the work

### Diagnostic Questions

1. Can you see visual cycle or procedure tracking charts in the area? Do they show expected vs. actual times?
2. Are the charts current to this or last shift?
3. Are incidents that delay work described clearly (What we **had** but did not want, **wanted** but did not have)?
4. Are visuals reviewed regularly? How frequently? How can you tell?
5. Can leaders & task-level people in the area cite improvements from problems noted on visual charts?
6. Are visuals used here for support tasks, e.g., materials, transport, attendance, assignments, qualifications?
7. Do leaders regularly review the visuals? How often? How can you tell?

### Assessment

Rate this area/areas from 1 to 5 on the scale below and note the rationale for this rating

<table>
<thead>
<tr>
<th>1: Pre-lean</th>
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<tr>
<td>No visuals / cycle tracking in place</td>
<td>Some cycle tracking charts; irregularly filled in. Most charts record numbers, do not document delays, problems. Where problems described, too vague for action. No or irregular review for action on problems. Visuals more “check the box” than tool to highlight problems, delays and drive improvement.</td>
<td>Many front line &amp; support areas here use visuals / cycle tracking charts. Charts are current. Most descriptions of problems are complete, specific enough for next steps (cause analysis or corrective action). Charts reviewed daily or on regular schedule. Problems noted on charts often result in assignments for action.</td>
<td>Visuals used for most line, support, &amp; admin activities here. Visuals used at most handoffs between functions / departments w/ regular joint review for action. Charts revised, added, dropped as things change. Nearly all problem descriptions clear, complete, actionable. Daily / regular reviews of charts drive assignments for cause analysis or corrective action.</td>
<td>Visuals / cycle tracking charts regularly used throughout the area, front line, support, and administrative activities. Visuals / tracking charts initiated at least daily by line leaders and occasionally by executives. Visuals / cycle tracking charts regularly drive improvements, are also periodically analyzed to identify and act on recurring problems.</td>
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</table>

**Rationale for this rating:**
### Standard Accountability Processes

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<th>Shift:</th>
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#### Intent

**Standard accountability processes:**
- Accountability processes should convert problems/opportunities noted on visuals, the floor, or from suggestions to task assignments – for cause analysis and/or corrective action in a daily Post-it® (or equivalent) process for briefer tasks, a weekly A3 process for longer ones.

#### Diagnostic Questions

1. How are improvement assignments and projects managed here: visually, by spreadsheet or list, or not at all?
2. Are regular (daily or weekly) meetings held here to make new task assignments to address problems and follow up on overdue assignments?
3. Do the regular meetings here have clear purpose and agenda – other than today’s anticipated work? What is it?
4. Do visual controls/cycle tracking charts result in task assignments to address interruptions, delays, capacity losses?
5. How many area leaders are familiar with and able to apply basic project management approaches – like work breakdown structures and dependencies – in thinking though and defining task assignments?
6. How well integrated are support, customer or supplier groups in this area’s improvement activities?

#### Assessment

Rate this area/areas from 1 to 5 on the scale below and note the rationale for this rating

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<tr>
<td>No regularly occurring visual process to make or follow up on task assignments for improvement based on identified problems or delays.</td>
<td>Daily or weekly start up / team meetings held regularly for improvement task assignments; many are completed on time. Some assignments are to support or admin groups vs. line area, or are made in response to major problems. Some using green / red coding for on time completion or past due tasks.</td>
<td>Team or area (line &amp; support group) meetings regularly (daily/weekly) held to make, follow up on improvement task assignments. Tasks posted visible to all. Attendance is consistent; most tasks are completed, most on time, most leaders use green/red coding for on time or late task completion. Tasks respond to both major, minor incidents. Much reference to customer/ user/ patient perspective.</td>
<td>Accountability meetings crisp, agenda followed, attendance faithful. Small assignments to visual accountability board; larger ones to A3 projects. Green/red coding is routine. Tasks from many sources, not just visuals but also employee suggestions, gemba walks, support areas. Many in area use project management skills on project work. Customer perspective is a given.</td>
<td>Using the accountability processes is routine in the area. All leaders regularly use basic project management tools to determine task assignments, dependencies, durations. Support and admin representatives routinely participate in line accountability process and have their own. Customer’s perspective informs most assignments, admin, support, frontline.</td>
</tr>
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</table>

#### Rationale for this rating:

Lean Management Gemba Worksheets  
© 2014 DMLC  Reprinted by Permission.  From Creating a Lean Culture, 3rd Edition
# Leader Standard Work (LSW)

**Date:**

**Location:**

**Shift:**

## Intent

Leader standard work should reflect process focus:

- The closer to the task execution level, the more frequent the focus (admin., support processes, production/pt. care).
- Should reflect “go to the place, talk with the people, look at the process” for all levels of leadership.
- Review of visuals (current? Quality of entries? Regular in-shift review?), accountability (assignments linked to problems from visuals), follow up on improvement in leaders’ standard work (faithful execution of redefined processes).

## Diagnostic Questions

1. Do leaders in this area have standard work? Do they follow it? Do they routinely have it with them? Can leaders describe how standard work has helped them be more effective (if they see it that way)?

2. Are task level people in this area aware of the content of their leaders’ standard work?

3. Are leader standard work documents used as working “diaries” to record notes and observations? Do superiors meet with subordinate leaders to review these documents periodically? Ever? How often?

4. How often do this area’s superiors review subordinate leaders’ standard work for updating based on new issues and changes, e.g. resulting from accountability board tasks?

5. Is there a defined place where completed standard work documents are stored for a few months? Is it used?

6. Has leader standard work been used in this area to facilitate transitions between leaders?

7. Is leader standard work focused on compliance or improvement or balanced?

## Assessment

Rate this area/areas from 1 to 5 on the scale below and note the rationale for this rating:

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<tr>
<td>No leader standard work (LSW) in place.</td>
<td>Leader standard work exists for a few positions. It’s rarely carried, is followed sporadically. The original content has not been revised, refined. Most leaders view it as a check the box activity to drive compliance with defined processes with little or no emphasis on improvement.</td>
<td>Standard work exists for all line leaders in area: team, supervisor, manager. Most have their standard work with them, follow it, use it as working record of the day. Most leaders can give examples illustrating how leader standard work has helped them and sustained improvements.</td>
<td>All leaders in the area carry, follow, and use their standard work as a daily working record. All superiors regularly review subordinate leaders’ LSW documents with them weekly. All leaders can talk about how LSW benefits them and the process. LSW is revised to reflect and sustain process changes.</td>
<td>All transitions between leaders include review (possible revision), and walk through of LSW. All new leaders follow LSW from day one on job. Weekly LSW document review with superior used as monitoring, communication, and improvement method. Defined process for turn-in, storage LSW documents.</td>
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</table>

**Rationale for this rating:**
## Value Stream Mapping

<table>
<thead>
<tr>
<th>Intent</th>
<th>Value Stream Maps (VSMs) should do two things:</th>
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<tbody>
<tr>
<td></td>
<td>• Show the step-by-step movement of information, patients, and/or material through an area (or an entire value stream) that produces value for a customer, user, or patient – internal or external.</td>
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<tr>
<td></td>
<td>• Communicate process performance measures (safety, quality, time, cost), process problems, and improvement plans.</td>
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</table>

### Diagnostic Questions

1. Are value stream maps visible here? If so, do they show current and planned future states and measures?
2. Are improvements planned for the area (or complete value streams) visibly posted? Can people explain them?
3. Are VSMs used to identify, communicate, track, and measure process improvements in the area?
4. Do VSMs show planned kaizens, completion status of kaizens, and improvement targets in current vs. future state performance measures? Can people explain the maps, kaizens, and measures?
5. Who prepares value stream maps here? How many of this area’s leaders are proficient value stream mappers?

### Assessment

Rate this area/areas from 1 to 5 on the scale below and note the rationale for this rating

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<tr>
<td>No maps visible. Maps not used as part of area’s improvement planning. Few, if any, in area know how to map.</td>
<td>Some tech specialists in area know how to map; most leaders do not. Maps, when present, show current state only. Maps may be posted but are out of date.</td>
<td>The area has visible plans for improvement; many of which shown on current and future state VSMs as planned or active kaizens. Some VSMs show current vs. future measures with targets for improvements (such as in turnaround and throughput times, % value add time, patient safety incidents, productivity, uptime, yield, etc). Many people can explain the maps and measures. Many leaders are proficient mappers and draw their own VSMs.</td>
<td>Current state and 90-day future state maps showing improvement goals (measures) and activities (kaizens) are visible in the area. Most people can explain them. All leaders can map, use VSMs to systematically identify improvements large and small. Completion status of kaizens is shown on the VSMs, linked to project plans, and shown visually as status of progress against 90-day goals.</td>
<td>VSMs regularly used in the area’s communications. Front line leaders teach value stream mapping. All area leaders are proficient mappers. Area uses posted VSMs to show its improvement plans. The area’s performance (down to the team) is reflected in the current state measures summary on its VSM (e.g. turnaround and throughput times, % value add time, safety and incidents, patient and customer satisfaction, productivity, uptime, yield).</td>
</tr>
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</table>

### Rationale for this rating:
# Lean Management Standards Gemba Worksheet

## Process Definition

**Date:**

**Location:**

**Shift:**

### Intent

Process Definition should reflect two things:

- Line and support tasks should be documented and the documentation should be readily accessible.
- Documentation matches current practice; execution is consistent with documentation across people and shifts.

### Diagnostic Questions

1. Are there documented definitions for all line and support processes? Where is the documentation located?
2. Is the documentation current; does it match actual practice?
3. Is standard work available for production tasks? For all levels of staffing, if applicable? Is it posted?
4. For repetitive processing areas, are operator balance charts available for each level of staffing, and posted in the areas they reflect?
5. Are definitions available, and posted for tasks in the management process (e.g., who maintains tracking charts, standard meeting agendas, standard work for leaders, etc.)?
6. Are Job Instruction Training tools (job breakdown sheets) used for process documentation? For training? Who maintains them? Are they current? Examples?

## Assessment

Rate this area/areas from 1 to 5 on the scale below and note the rationale for this rating:

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<tr>
<td>Process documentation either in binders or IT system not readily accessible. Most documentation is out of date – does not match actual practice.</td>
<td>Discussions in progress to update and convert documentation to useable format for a few areas on the floor. Some task/work balance charts visible, but most not current and for one staffing level. In repetitive areas, standard work with expected task times posted, but most out of date and/or for one takt pace.</td>
<td>Standard methods, procedures, step-by-step charts with expected times, as applicable, are visible in some areas for one level of staffing. In repetitive areas (e.g., processing or assembly), standard work or standardized procedure charts with times are available for some tasks/work areas.</td>
<td>Most areas that operate with multiple levels of staffing have task balance charts with expected times as applicable. Processes are defined for all production tasks and most regularly occurring management processes. Process documentation is kept at the point of use or application and is kept updated to match actual practice as improvements and changes occur.</td>
<td>Expected performance for all regularly occurring tasks and processes (even if infrequent) have been defined and documented. Process documentation is either displayed or accessible at point of use. Actual practice matches process documentation; evidence that documentation is updated to reflect changes in practice.</td>
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</tbody>
</table>

### Rationale for this rating:
## Lean Management Standards Gemba Worksheet

### Process Discipline

**Date:**

**Location:**

**Shift:**

<table>
<thead>
<tr>
<th>Intent</th>
<th>Process Discipline should reflect two things:</th>
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<tbody>
<tr>
<td></td>
<td>• Line and support, and regularly occurring (even if infrequent) leadership tasks are documented.</td>
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<tr>
<td></td>
<td>• Actual practice reflects disciplined adherence to defined processes. Definitions are kept updated as process change.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diagnostic Questions</th>
<th>1. Are line, support, management processes defined? Regularly followed (e.g., training and qualification, repetitive production, changeovers/turnarounds, safety and housekeeping)?</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>2. Do crisis situations result in process shortcuts (e.g., material replenishment, qualified staff for defined task, changeover/turnarounds, holding areas for flow impediments)?</td>
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<td>3. Are process assessments carried out? Regularly? How frequently? By those in the area or outsiders? Do internal as well as external assessment results produce improvements?</td>
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<td>4. When assessments or cycle tracking turn up noncompliance or misses, are problem-solving tools used?</td>
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<td></td>
<td>5. To what degree does process focus lead to process improvement and changes? Is there observable evidence?</td>
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<td></td>
<td>6. How regularly do leaders conduct gemba walks to teach as well as to inspect? How many leaders do so?</td>
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### Assessment

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<td>Leaders’ attention is mostly focused on expectations for results. Consistent adherence to defined processes/expectations is almost totally lacking.</td>
<td>Processes are mostly followed when things run smoothly, but abandoned with high volume or when problems arise. A few leaders can speak to the Lean rationale for process discipline and sticking with it.</td>
<td>Most leaders focus on disciplined adherence in obvious processes such as frequently occurring or repetitive tasks and cycle tracking charts, a few also focus on discipline in lower volume/frequency and/or support processes. Most leaders do a good, clear, specific job of responding to recorded process misses.</td>
<td>Leaders’ focus (helped by cycle tracking charts) includes discipline in most line and support processes, including housekeeping, high and low volume production, changeovers/turnarounds, labor planning, material supply/replenishment. Most leaders use process tracking data to identify and act on improvement opportunities.</td>
<td>Regular and frequent reviews occur of production and support processes including regular process assessments to maintain adherence and identify improvement opportunities. All processes (line and support) track their performance and respond to misses with improvement task assignments and/or projects visible in the area.</td>
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Rationale for this rating:
Lean Management Standards Gemba Worksheet

**Process Improvement**

<table>
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<tr>
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<tbody>
<tr>
<td>Shift:</td>
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**Intent**

Process Improvement should reflect two things:
- Everyone’s job includes process improvement: line, support, admin people at all levels, floor to executive.
- Improvement includes activities from small to large in scope, driven by process tracking and employee suggestions.

**Diagnostic Questions**

1. Who is usually involved in improvement: specialists, leaders, IT, support groups, suppliers, floor workers?
2. Who would most leaders say is responsible for process improvement?
3. How are assignments made for improvement tasks? Are the assignments and their status visually displayed?
4. How typical is it for improvement assignments to end up with actual improvements having been made?
5. Are kaizens a regular part of the improvement process in the area? Who participates: who leads them?
6. Does improvement work focus mostly on big, technically-led projects? Are small improvement pursued?
7. Is there a regular way for employees to suggest improvements? What percentage of employees make suggestions? How many are implemented: few, some, most, all?

**Assessment**

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<td>Improvements made by formal teams or in response to catastrophic failures. IT, Engineering, Finance, HR, other support groups lead improvement projects.</td>
<td>Project teams make small improvements during implementation debugging. Most leaders see improvement as responsibility of technical support groups. Suggestion systems may have been introduced but are not sustained.</td>
<td>Most leaders say they should be involved in process improvement; some actively support improvement throughout their areas. Many leaders use green/red daily accountability boards to drive improvement. Some tasks completed on time; some A3s used to track improvement projects. Most leaders have participated in kaizens, few have led, none facilitate kaizens.</td>
<td>Most leaders’ clearly see process improvement within their responsibility, and can give examples of their involvement. All leaders have been in kaizens, and most now regularly lead kaizens. Most leaders effectively use daily or weekly task assignments boards, A3 project plan reviews as shown by audits of boards and completed tasks. Some leaders experimenting with employee suggestion systems.</td>
<td>Task assignments from regular stand up meetings regularly result in small and large improvements. Visual employee suggestion systems established, sustained with steady flow of ideas, output of implemented improvements. Improvement plans, targets displayed on area info centers. Many leaders qualified kaizen facilitators. Lean resource team with rotating staffs support local improvement activities and Lean training.</td>
</tr>
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Rationale for this rating:
### Root Cause Problem Solving

**Intent**

Root Cause Problem Solving should reflect two things:
- “Problem solving” understood to mean eliminating source of a problem once and for all.
- When problems arise, leaders ask “Why?” and immediately or later initiate data-based root cause problem solving.

**Diagnostic Questions**

1. How often are workarounds used instead of investigating and resolving underlying causes of problems?
2. How often do leaders rely on data and analysis to attack a problem vs. gut feel, intuition, or impression?
3. To what degree do leaders expect changes will expose previously unseen problems that cannot be specifically anticipated, but proceed anyway?
4. How frequently do leaders ask why something happened vs. just asking what will we do to get back on track?
5. How frequently are leaders involved in leading problem-solving efforts?
6. How well and widely used are problem-solving tools such as 5-whys, 8-step problem solving? Do leaders teach problem solving?
7. How frequently do leaders raise expectations for process performance in order to uncover the next level of process interruption or problem?

**Assessment**

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<td>Problem solving only focused on workarounds, not finding what caused the problem. Where cause analysis used, it is in formal technical project teams. Leaders can’t describe problem solving, or if can, rarely if ever follow it.</td>
<td>Leaders have begun using visuals to collect problem data but with little emphasis on cause analysis. Workarounds remain common response to problems. Evidence of one or few attempts at systematic problem solving. No leaders teach problem solving.</td>
<td>Some leaders beginning to ask why, pursue root causes for major problems, teach problem solving. Workarounds are recognized as such; evidence of problem-solving methods used to understand and attack causes. Uncovering flow interrupters still viewed as troubling surprises.</td>
<td>Many leaders asking why, pursuing root cause for big and small problems, beginning to use some form of structured problem solving – at least 5 Whys. Some teaching problem solving. Leaders expect changes to expose problems and to solve them at root cause level. Many leaders now seeking to improve their processes.</td>
<td>All leaders routinely expect cause analysis and pursuit of root causes for problems large and small. Most leaders teach problem solving. Process designs and measurements regularly tightened up to uncover the next level of problem: stated goal is to have perfect, zero-waste processes.</td>
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