Using the Shingo Model for Operational and Quality Excellence

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The 3 Point Group

“A well though out approach effectively deployed favors positive results.”

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Table of Contents

• Enterprise Excellence Hierarchy
• Integrating Shingo with Baldrige, ISO 9001 2015 and ASQ Quality Tools
• About Shingo
• The Shingo Model
• Shingo 10 Guiding Principles
• Shingo 4 Dimension of the Assessment Criteria
• Shingo and ISO 9001:2015 Relationship
• Shingo Assessment Scoring

Sources:
• Shingo Institute Shingo Model
• Baldrige Criteria for Performance Excellence
• ISO 9001:2015 Standard
• ASQ Quality Tools, and
• Other best practices
Enterprise Excellence Hierarchy

Baldrige Organizational Profile

Shingo Criteria for Operational Management

ISO 9001 Quality Management System

ISO 17025 Competence of Testing & Calibration

ANSI Z540.3 Calibration of Measuring & Test Equipment

Uncertainty

Author: Vern Goodwalt of The 3 Point Group
Integrating Shingo with Baldrige, ISO 9001:2015 and ASQ Quality Tools
“Organizational Culture & Metrology”
Does It Make A Difference? Yes.
Baldrige Framework for Performance Excellence

The Organizational Profile sets the context for your organization. It serves as the background for all that you do.

Baldrige Categories

Organizational Profile:
* Environment * Relationships * Strategic Situation

1. Leadership
2. Strategic Planning
3. Customer Focus
4. Measurement, Analysis & Knowledge Management
5. Work Force
6. Operations Focus
7. Results
The 4 Dimensions of the Shingo Assessment Criteria

• Dimension 1 - Cultural Enablers (250 points)
• Dimension 2 - Continuous Process Improvement (350 Points)
• Dimension 3 - Enterprise Alignment (200 Points)
• Dimension 4 - Results (200 Points)
  ➢ 4.A Quality
  ➢ 4.B Cost/Productivity
  ➢ 4.C Delivery
  ➢ 4.D Customer Satisfaction
  ➢ 4.E Safety/Environment/Morale
ISO 9001:2015
Quality Management System Framework

ISO Clauses
4. *Context of the Organization
5. *Leadership
6. *Planning
7. Support Processes
8. *Operations
9. *Performance Evaluations
10. Improvement (Plan-Do-Check-Act)

* ISO change areas

A lot of ISO 9004 2009 is pulled into ISO 9001 2015
Plan-Do-Check-Act for ISO 9001:2015

Act - incorporate improvement as necessary

Plan the process - (Extent of planning on RISK)

DO - carry out the process

Check - monitor/ measure process performance

Interaction with other processes
ISO 9001 2015 Integrates Plan-Do-Check-Act as a Continuous Process Improvement Tool

Rich data collection & application of quality tools for data visualization that presents the truth.
<table>
<thead>
<tr>
<th>ASQ Quality Tools from A to Z</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Web site:</strong> <a href="http://www.asq.org/learn-about-quality/quality-tools.html">http://www.asq.org/learn-about-quality/quality-tools.html</a></td>
</tr>
<tr>
<td><strong>Some Examples of the 54 tools and 17 Excel templates available.</strong></td>
</tr>
<tr>
<td><strong>A</strong></td>
</tr>
<tr>
<td>- A3 report</td>
</tr>
<tr>
<td>- Affinity diagram</td>
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<tr>
<td>- Arrow diagram</td>
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<tr>
<td><strong>B</strong></td>
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<tr>
<td>- Balanced scorecard</td>
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<tr>
<td>- Benchmarking</td>
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<tr>
<td>- Box and whisker plot</td>
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<tr>
<td>- Box and whisker plot template <em>(Excel, 64 KB)</em></td>
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<tr>
<td>- Brainstorming</td>
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<tr>
<td><strong>C</strong></td>
</tr>
<tr>
<td>- Cause-and-effect/Ishikawa/fishbone diagram</td>
</tr>
<tr>
<td>- Cause-and-effect/Ishikawa/fishbone diagram template <em>(Excel, 39 KB)</em></td>
</tr>
<tr>
<td>- Cause analysis tools</td>
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<tr>
<td>- Check sheet</td>
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<tr>
<td>- Check sheet template <em>(Excel, 37 KB)</em></td>
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<tr>
<td>- Control chart</td>
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<td>- Control chart template <em>(Excel, 1.08 MB)</em></td>
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<td><strong>E</strong></td>
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<td>- Eight disciplines (8D)</td>
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<td>- Evaluation and decision-making tools</td>
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<td><strong>F</strong></td>
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<tr>
<td>- Failure mode effects analysis (FMEA)</td>
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<td>- Failure mode effects analysis (FMEA) template <em>(Excel, 31 KB)</em></td>
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<td>- Fishbone/Ishikawa/cause-and-effect diagram</td>
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<tr>
<td>- Fishbone/Ishikawa/cause-and-effect diagram template <em>(Excel, 39 KB)</em></td>
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<td>- Five S (5S)</td>
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<td>- Five whys and five hows</td>
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<td>- Flowchart</td>
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<td>- Flowchart template <em>(Excel, 57 KB)</em></td>
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<td>- Force field analysis</td>
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<td>- Gage repeatability</td>
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<tr>
<td>- Gantt chart</td>
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<td>- Gantt chart template <em>(Excel, 56 KB)</em></td>
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<td><strong>K</strong></td>
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<td>- Impact effort matrix</td>
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<td><strong>M</strong></td>
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<td>- Kano model</td>
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<tr>
<td>- Matrix diagram</td>
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<tr>
<td>- Mistake-proofing</td>
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<tr>
<td>- Multivoting</td>
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<td><strong>N</strong></td>
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<tr>
<td>- Nine windows</td>
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<td>- Nominal group technique</td>
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<tr>
<td><strong>P</strong></td>
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<tr>
<td>- Pareto chart</td>
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<tr>
<td>- Pareto chart template <em>(Excel, 54 KB)</em></td>
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<tr>
<td>- Plan-do-check-act (PDCA) cycle or plan-do-study-act (PDSA) cycle</td>
</tr>
<tr>
<td>- Problem concentration diagram</td>
</tr>
<tr>
<td>- Process analysis tools</td>
</tr>
<tr>
<td>- Process decision program chart (PDPC)</td>
</tr>
<tr>
<td>- Project planning and implementation tools</td>
</tr>
</tbody>
</table>
About Shingo
Shigeo Shingo

• Few individuals have contributed as much to the development of the ideas called TQM, JIT and Lean as did Shigeo Shingo. Over the course of his life, Dr. Shingo wrote and published 17 books, eight of which were translated from Japanese into English.

• Many years before his books became popular in the Western world, Dr. Shingo wrote about the ideas of ensuring quality at the source, flowing value to customers, working with zero inventories, rapidly setting up machines through the system of “single-minutes exchange of die” (SMED)* and going to the actual workplace to grasp the true situation there (“going to gemba”).

• He worked extensively with Toyota executives, especially Mr. Taiichi Ohno, who helped him to apply his understanding of these concepts in the real world at Toyota.
A Brief Introduction to Shingo

• For any organization to be successful in the long term, it must engage in a relentless quest to make things better. Leaders must lead their organizations on a continuous pursuit of perfection.

• Improvement is hard work! It requires great leaders, smart managers and empowered associates. Sustainable improvement cannot be delegated down nor organized into a temporary program or initiative.

• Every organization is naturally in some state of transformation. The critical question is “Into what is the organization being transformed?”

• Sustainable results depend upon the degree to which an organization’s culture is aligned to specific guiding principles rather than depending solely on tools, programs or initiatives. The Shingo Model provides a powerful framework that will guide the reader in transforming an organization’s culture and achieving ideal results.
Utah State University is the Home of the Shingo Institute Today

Purpose:
Based on timeless principles, the Shingo Institute shapes cultures that drive operational excellence.

Mission:
The Shingo Institute conducts cutting-edge research, provides relevant education, performs insightful enterprise assessment, and recognizes organizations committed to achieving sustainable world-class results.
The Shingo Model
THE SHINGO MODEL™

• The Shingo Model is not an additional program or another initiative to implement. Rather, it introduces Shingo Guiding Principles on which to anchor current initiatives and to fill the gaps in efforts toward ideal results and enterprise excellence.
THREE INSIGHTS OF ENTERPRISE EXCELLENCE™

1. Ideal Results Require Ideal Behaviors
   The results of an organization depend on the way their people behave.

2. Purpose and Systems Drive Behavior
   It has long been understood that beliefs have a profound effect on behavior.

3. Principles Inform Ideal Behavior
   Principles are foundational rules that govern the consequences of behaviors.

“*There are three constants in life...change, choice and principles.*” —Stephen R. Covey
Building the Shingo Model

- **TOOL:** a single device or item that accomplishes a specific task (e.g., value stream map, health benefit plan, an award, newsletter, etc.)

- **SYSTEM:** a collection of tools or tasks that are highly integrated to accomplish an outcome (e.g., production plan, onboarding new employees, bookkeeping, recognition systems, customer support system, etc.)

- **RESULT:** a measurable outcome—either successful or unsuccessful—from implantation of tools and systems (e.g., faster turnaround, more engagement from employees, higher customer or patient satisfaction, etc.)
A Missing Element in the Model

• Tools and systems alone do not operate a business. People do and the culture they work in.
Guiding Principles

For any organization to be successful in the long term, it must be engaged in a relentless quest to make things better. Failure to make this an organizational priority will inevitably result in organizational decline.
Shingo 10 Guiding Principles
10 Guiding Principles for Enterprise Excellence

• Study and experience has yielded a list of ten guiding principles, known as the Shingo Guiding Principles, that are the basis for building a lasting culture and achieving enterprise excellence.

• Results - 1. Create Value for the Customer

• Enterprise Alignment - 2. Create Constancy of Purpose 3. Think Systemically


• Cultural Enablers - 9. Lead with Humility 10. Respect Every Individual
The 4 Dimensions of the Shingo Criteria
The 4 Dimensions for the Assessment Criteria Framework

• This section covers the four dimensions of the Shingo Model. and serves as a guide and provides examples of systems that drive principle-level behavior and tools that support those systems.
  - Dimension 1 - Cultural Enablers
  - Dimension 2 - Continuous Process Improvement
  - Dimension 3 - Enterprise Alignment
  - Dimension 4 - Results

The following is not intended to be a check list for each dimension; it simply provides examples of guiding principles, supporting concepts, and systems in each dimension.
Dimension 1 – Cultural Enablers (250 Points)

• **Guiding Principles:**
  - Lead with humility
  - Respect every individual

• **Supporting Concepts:**
  - Assure a safe environment
  - Develop people
  - Empower and involve everyone

• **Systems:**
  - Individual development
  - On-the-job training/training within industry (OJT/TWI)
  - Coaching
  - Standard daily management
  - Leadership development
  - Idea sharing
  - Suggestion and involvement
  - Reward and recognition
  - Communication
  - Environmental, health and safety
  - Education/training
  - Community involvement
  - Recruitment and succession planning
  - Accountability
Dimension 2 – Process Improvement (350 Points)

• Guiding Principles:
  ➢ Focus on Process
  ➢ Embrace Scientific Thinking
  ➢ Flow and Pull Value
  ➢ Assure Quality at the Source
  ➢ Seek Perfection

• Supporting Concepts:
  ➢ Stabilize processes
  ➢ Rely on data and fact
  ➢ Standardize processes
  ➢ Insist on direct observation
  ➢ Focus on value stream
  ➢ Keep it simple and visual
  ➢ Identify and eliminate waste
  ➢ No defects passed forward
  ➢ Integrate improvement with work

• Systems:
  ➢ Voice of the customer
  ➢ Problem-solving (A3 Thinking, PDCA, DMAIC)
  ➢ Value Stream Analysis (VSA)
  ➢ Total productive maintenance (TPM)
  ➢ Visual management
  ➢ 5S methodology
  ➢ Supplier development
  ➢ Continuous improvement methodology
  ➢ Production Process Preparation (3P)
  ➢ Quick changeover or setup reductions (SMED)
  ➢ Error proofing/zero defects
  ➢ New market development and current market exploitation
  ➢ Quality function deployment, concurrent engineering, etc. for product development
  ➢ Theory of constraints
  ➢ Bottlenecks and others
Dimension 3 – Enterprise Alignment (200 Points)

• **Guiding Principles:**
  - Create Constancy of Purpose
  - Think Systemically

• **Supporting Concepts:**
  - See reality
  - Focus on long-term
  - Align systems
  - Align strategy
  - Standardize daily management

• **Systems:**
  - Strategy deployment
  - Daily management
  - Assessment
  - Communication
  - Customer relationship management (CRM)
  - Information technology
  - Accounting/finance
  - Measurement/scorecard
  - Reporting/accountability
Dimension 4 – Results (200 Points)

• Dimension 4 Results Sub-sets
  ➢ 4.A - Quality
  ➢ 4.B - Cost/Productivity
  ➢ 4.C - Delivery
  ➢ 4.D – Customer Satisfaction
  ➢ 4.E - Safety/Environment/Morale

• Guiding Principle:
  ➢ Create Value for the Customer

• Supporting Concepts:
  ➢ Measure what matters
  ➢ Align behaviors with performance
  ➢ Identify cause-and-effect relationships

• Systems:
  ➢ Voice of the customer
  ➢ Strategy deployment
  ➢ Communications
  ➢ Management reporting
Shingo & ISO 9001:2015 Relationship as to Context of the Organization & Risk-Based Thinking
## Shingo - Context of the Organization

### Dimension 1
**Cultural Enablers**

<table>
<thead>
<tr>
<th>Guiding Principles:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Lead with Humility</td>
</tr>
<tr>
<td>• Respect Every Individual</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Supporting Concepts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Assure a safe environment</td>
</tr>
<tr>
<td>• Develop people</td>
</tr>
<tr>
<td>• Empower and involve everyone</td>
</tr>
</tbody>
</table>

### Dimension 3
**Enterprise Alignment**

<table>
<thead>
<tr>
<th>Guiding Principles:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Create Constancy of Purpose</td>
</tr>
<tr>
<td>• Think Systemically</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Supporting Concepts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• See reality</td>
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<tr>
<td>• Focus on long-term</td>
</tr>
<tr>
<td>• Align systems</td>
</tr>
<tr>
<td>• Align strategy</td>
</tr>
<tr>
<td>• Standardize daily management</td>
</tr>
</tbody>
</table>


## Dimension 2
### Continuous Process Improvement

**Guiding Principles:**
- Focus on Process
- Embrace Scientific Thinking
- Flow and Pull Value
- Assure Quality at the Source
- Seek Perfection

**Supporting Concepts:**
- Stabilize processes
- Rely on data and fact
- Standardize processes
- Insist on direct observation
- Focus on value stream
- Keep it simple and visual
- Identify and eliminate waste
- No defects passed forward
- Integrate improvement with work

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## Dimension 4
### Results

**Guiding Principle:**
- Create Value for the Customer

**Supporting Concepts:**
- Measure what matters
- Align behaviors with performance
- Identify cause-and-effect relationships
4.1 Understanding the Organization and its Context
The organization shall determine external and internal issues that are relevant to its purpose and its strategic direction and that affect its ability to achieve the intended result(s) of its quality management system.

Introduction Item 0.2 Quality Management Principles
This International Standard is based on the quality management principles described in ISO 9000. The descriptions include a statement of each principle, a rationale of why the principle is important for the organization.

Some examples of benefits associated with the principle and examples of typical actions to improve the organization’s performance when applying the principle.

- The quality management principles are:
  - customer focus;
  - leadership;
  - engagement of people;
  - process approach;
  - improvement;
  - evidence-based decision making;
  - relationship management.
6.1 Actions to Address Risk and Opportunities

6.1.1 When planning for the quality management system, the organization shall consider the issues referred to in 4.1 and the requirements referred to in 4.2 and determine the risks and opportunities that need to be addressed to:

6.1.2 The organization shall plan:
   a) actions to address these risks and opportunities;
   b) how to:
      1) integrate and implement the actions into its quality management system processes (see 4.4);
      2) evaluate the effectiveness of these actions.

Actions taken to address risks and opportunities shall be proportionate to the potential impact on the conformity of products and services.

Introduction - Item 0.3.3 Risk-Based Thinking

- Risk-based thinking is essential for achieving an effective quality management system.
- To conform to the requirements of this International Standard, an organization needs to plan and implement actions to address risks and opportunities.
- Addressing both risks and opportunities establishes a basis for increasing the effectiveness of the quality management system, achieving improved results and preventing negative effects.
Assessment Scoring System
Assessment Intent

• The intent of the assessment is to evaluate the entire applying entity to determine the degree to which the principles of operational excellence are deeply embedded into the culture of the entire organization.

• The assessment evaluates results, as well as behavior.

• Each business system will be assessed to the entire Model, all dimensions and principles therein.

• Three dimensions of the Model are scored based on the behavior assessment scale, cultural enablers, continuous process improvement, and enterprise alignment.

• The fourth dimension, results, is scored using the behavior and results assessment scale.
Articulating Behaviors

• **FREQUENCY** – How often do we see the behavior?

• **DURATION** – Are we seeing the behavior for the first time, or have we seen this behavior for years?

• **INTENSITY** – Is there a sense of passion and importance for the behavior (i.e. to deviate would signal problems)?

• **SCOPE** – Do we see the behavior in just a few cells/areas, or is it widespread throughout the organization?

• **ROLE** – Do we see appropriate focus on tools, systems and principles at each level of the organization: leaders, managers and associates?
### Integration Levels

#### Scoring Matrix

<table>
<thead>
<tr>
<th>Cultural Enablers (250 pts.)</th>
<th>Cultural Enablers</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>40%</td>
</tr>
<tr>
<td>Continuous Process Improvement (350 pts.)</td>
<td>Continuous Process Improvement</td>
<td>Weight</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15%</td>
</tr>
<tr>
<td>Enterprise Alignment (200 pts.)</td>
<td>Enterprise Alignment</td>
<td>Weight</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50%</td>
</tr>
<tr>
<td>Results (200 pts.)</td>
<td>Quality</td>
<td>Measures (20%)</td>
</tr>
<tr>
<td></td>
<td>Cost/Productivity</td>
<td>Measures (20%)</td>
</tr>
<tr>
<td></td>
<td>Delivery</td>
<td>Measures (20%)</td>
</tr>
<tr>
<td></td>
<td>Customer Satisfaction</td>
<td>Measures (20%)</td>
</tr>
<tr>
<td></td>
<td>Safety/Environment/Morale</td>
<td>Measures (20%)</td>
</tr>
</tbody>
</table>
Behavior – Assessment Scale

Senior leadership, managers and associates at each business system will be assessed to determine the degree to which their behaviors are in alignment with the principles of operational excellence. Are the leaders, managers and associates doing things that will result in the desired culture?

<table>
<thead>
<tr>
<th>Role</th>
<th>Level 1 0-20%</th>
<th>Level 2 21-40%</th>
<th>Level 3 41-60%</th>
<th>Level 4 61-80%</th>
<th>Level 5 81-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leaders</td>
<td>Leaders are focused mostly on fire-fighting and largely absent from improvement efforts</td>
<td>Leaders are aware of other’s initiatives to improve but largely uninvolved</td>
<td>Leaders set direction for improvement initiatives and supports efforts of others</td>
<td>Leaders are involved in improvement efforts and supports the alignment of principles of operational excellence with systems</td>
<td>Leaders are focused on ensuring the principles of operational excellence are driven deeply into the culture and regularly assessed for improvement</td>
</tr>
<tr>
<td>Managers</td>
<td>Managers are oriented toward getting results “at all costs”</td>
<td>Managers mostly look to specialists to create improvement through project orientation</td>
<td>Managers are involved in developing systems and helping others to use tools effectively</td>
<td>Managers focus on driving behaviors through the design of systems</td>
<td>Managers are primarily focused on continuously improving systems to drive behavior more closely aligned with principles of operational excellence</td>
</tr>
<tr>
<td>Associates</td>
<td>Associates focus on doing their jobs and are largely treated like an expense</td>
<td>Associates are occasionally asked to participate on an improvement team usually led by someone outside their natural work team</td>
<td>Associates are trained and participate in improvement projects</td>
<td>Associates are involved every day in using tools to drive continuous improvement in their own areas of responsibility</td>
<td>Associates understand principles “the why” behind the tools and are leaders for improving not only their own work systems but also others within their value stream</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Infrequent Rare</th>
<th>Event-based Irregular</th>
<th>Frequent Common</th>
<th>Consistent Predominant</th>
<th>Constant Uniform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration</td>
<td>Initiated Undeveloped</td>
<td>Experimental Formative</td>
<td>Repeatable Predictable</td>
<td>Established Stable</td>
<td>Culturally Ingrained Mature</td>
</tr>
<tr>
<td>Intensity</td>
<td>Apathetic Indifferent</td>
<td>Apparent Individual Commitment</td>
<td>Moderate Local Commitment</td>
<td>Persistent Wide Commitment</td>
<td>Tenacious Full Commitment</td>
</tr>
<tr>
<td>Scope</td>
<td>Isolated Point Solution</td>
<td>Silos</td>
<td>Predominantly Operations Value Stream</td>
<td>Multiple Business Processes Integrated Value Stream</td>
<td>Enterprise-wide Extended Value Streams</td>
</tr>
<tr>
<td>Lenses</td>
<td>Level 1 0-20%</td>
<td>Level 2 21-40%</td>
<td>Level 3 41-60%</td>
<td>Level 4 61-80%</td>
<td>Level 5 81-100%</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Stability</td>
<td>Little to no evidence of stability</td>
<td>Has begun to stabilize</td>
<td>Initiating predictability</td>
<td>Stable</td>
<td>Predictable</td>
</tr>
<tr>
<td></td>
<td>Little to no predictability</td>
<td>Building maturity</td>
<td></td>
<td>Long-term</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Beginning to implement</td>
<td>All levels have become comfortable with the measures</td>
<td></td>
<td>Mature</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unpredictable</td>
<td>2-3 years</td>
<td></td>
<td>4+ years</td>
<td></td>
</tr>
<tr>
<td>Trend/Level</td>
<td>Level is low</td>
<td>Moderate improvement in level</td>
<td></td>
<td>High level of attainment</td>
<td>Considered world-class</td>
</tr>
<tr>
<td></td>
<td>Trend is poor</td>
<td>Benchmarking is industry-focused</td>
<td></td>
<td>Benchmarks constantly raise the bar and are a function of process</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Little to no evidence of goals</td>
<td>Trends are mostly positive to flat with some backsliding</td>
<td></td>
<td>not industry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Little evidence to no evidence of benchmarking</td>
<td></td>
<td></td>
<td>Positive trend with very few anomalies to explain</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Trend is well above expectations</td>
<td></td>
</tr>
<tr>
<td>Alignment</td>
<td>Isolated with inconsistent usage of measures</td>
<td>Some areas aligned, other than operations</td>
<td></td>
<td>All measures align to corporate goals and down to the lowest level</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Little alignment</td>
<td>Performance measures aligned in operations</td>
<td></td>
<td>Enterprise-wide extended value stream</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strong silos</td>
<td>Silos are beginning to fall</td>
<td></td>
<td>No silos</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Working toward enterprise-wide alignment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improvement</td>
<td>Little to no systematic feedback</td>
<td>Regular feedback in some areas</td>
<td></td>
<td>Routine feedback to appropriate party</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sporadic feedback</td>
<td>All areas do not address feedback systematically</td>
<td></td>
<td>Evidence of feedback in all areas</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Little evidence of goal setting some evidence in operations</td>
<td>Many areas beyond operations have a process to set goals</td>
<td></td>
<td>Almost all areas have goals that are realistic and challenging</td>
<td></td>
</tr>
</tbody>
</table>