
ASSESSMENT CRITERIA

The Shingo assessment methodology is being embraced by organizations all over the world, without barrier to industry or geography. We have seen involvement expand far beyond its manufacturing roots into healthcare, government and financial services. There are three levels of recognition in place to encourage organizations to engage and utilize the *Shingo Model™* as early as possible in their cultural transformation. Organizations can be awarded the Shingo Prize, Shingo Silver Medallion and Shingo Bronze Medallion. A third party, non-biased assessment of your organization can provide a benchmark and eye-opening feedback that will accelerate your cultural transformation.

The Shingo Prize is awarded to organizations that demonstrate a culture where principles of operational excellence are deeply embedded into the thinking and behavior of all leaders, managers and associates. Performance is measured both in terms of business results and the degree to which business, management, improvement and work systems are driving appropriate and ideal behavior at all levels. Leadership is strongly focused on ensuring that principles of operational excellence are deeply imbedded into the culture and regularly assessed for improvement. Managers are focused on continuously improving systems to drive behavior that is closely aligned with the principles of operational excellence. Associates are taking responsibility for improving not only their work systems but also other systems within their value stream. Understanding the “why” has penetrated the associate level of the organization. Improvement activity has begun to focus on the enterprise as a whole. At the Shingo Prize level, the scorecard has clearly defined performance measures and is beginning to include measures of behavior. Key measures are stable, predictable and mature with positive trends and few anomalies. There are realistic and challenging goals in most areas with a good understanding of world-class



performance. Most measures are aligned to corporate goals and cascade to the lowest level. Silos are difficult to identify.

The Shingo Silver Medallion is awarded to organizations who demonstrate strong use of tools and techniques, have mature systems that drive improvement, and are beginning to align thinking and organizational behavior with correct principles of operational excellence. Leadership is involved in improvement efforts and supports the alignment of principles of operational excellence with systems. Managers are deeply involved and focused on driving behaviors through the design of systems. Associates are involved every day in using improvement tools to drive continuous improvement in their areas of responsibility. Understanding the “why” has begun to penetrate the associate level of the organization. Improvement activity is focused on multiple business systems. At the silver level the scorecard has a broad spectrum of measures and is beginning to include behavioral elements. Key measures are stable with mostly positive trends, and all levels understand how to affect the measures appropriately for their areas. There are goals being set in most business systems. Alignment is clear and apparent in most business systems; plans have been set in place to bring them into alignment where it is not. There are few silos left.

The Shingo Bronze Medallion is awarded to organizations that demonstrate strong use of tools and techniques for business improvement and are working to develop effective systems to create continuity and consistency of tools applied throughout the business entity. Leadership is setting the direction for improvement and supports the efforts of others. Managers are involved in developing systems and helping others use tools effectively. Associates are trained and participate at a high rate on improvement projects. Understanding the “why” has still not penetrated down to the associate level of the organization. Improvement activity is still heavily focused on operations and has begun in support areas. At the bronze level measures are beginning to communicate cause and effect. Key measures have begun to stabilize with trends being mostly positive with some backsliding still evident. There are goals

being set in many areas outside of operations. Alignment may still be weak in areas other than operations, but efforts are being made to improve and work toward aligning the entire enterprise. Silos are beginning to fall.

The cultural assessment is broken into three distinct evaluation sections, the achievement report, the Shingo Cultural Online Performance Evaluation (SCOPE), and the site visit. Each section is evaluated and may be used to clarify, amplify, and verify the other sections.

Achievement reports are written by each applicant and tell the story of their transformation to operational excellence. The achievement report covers each dimension of the model and discusses the principles, systems and tools that are evident and the results they have produced. The achievement report, along with the SCOPE survey, is used by members of the Shingo Board of Examiners to evaluate an applicant’s eligibility to be awarded a site visit. Not all applicants will be awarded a site visit; furthermore, not all organizations that receive a site visit will become recipients. Further instruction on writing the achievement report will be provided in a later section of this document.

SCOPE will be administered to each applying entity. All data received from SCOPE will populate a Shingo database and be used to provide feedback to the applicant. Feedback from SCOPE will be part of a packet, which will be provided to each applicant regardless of whether or not they are awarded a site visit.

Site visits that are awarded to applicants follow a standard format. In summary, they are conducted by a team of examiners that have been trained and selected by the Shingo Institute. The team generally spends two days at the site evaluating the culture of the applicant; duration of a site visit may be extended depending on the application. Examiners observe behaviors, review documentation and measures and ask questions of all levels and business systems of the applying entity. Examiners are provided all evaluation resources available that pertain to an applicant. This could include, but is not limited to, the achievement report, the SCOPE survey results and past documentation used to challenge.

This robust assessment process is used for all entities applying for the Shingo Prize. It is the

most rigorous cultural assessment available because it combines documentation in the achievement report (perceived reality) along with two sources of direct observation, the SCOPE survey, and the site visit (actual reality). This provides the most accurate assessment of your culture available.

Assessment Criteria

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. The following is not intended to be a check list for each dimension; it simply provides examples of principles, systems and tools in each dimension. The systems and tools observed during an assessment are the artifacts of a culture. The behavior that is observed during an assessment is key to evaluating the level of cultural transformation that an organization has achieved. Ideal behaviors are characteristic of the highest level of achievement and are exemplified previously in the Model. Examples of questions in each dimension are also included for guidance purposes.

It is important to note that every business system within an organization is assessed to the entire Model, operations, product and service development, customer relations, management and supply. Business systems may be characterized differently in any given organization although the assessment methodology still applies. The following diagram illustrates the relationship between the different systems in an organization (see Figure 3).

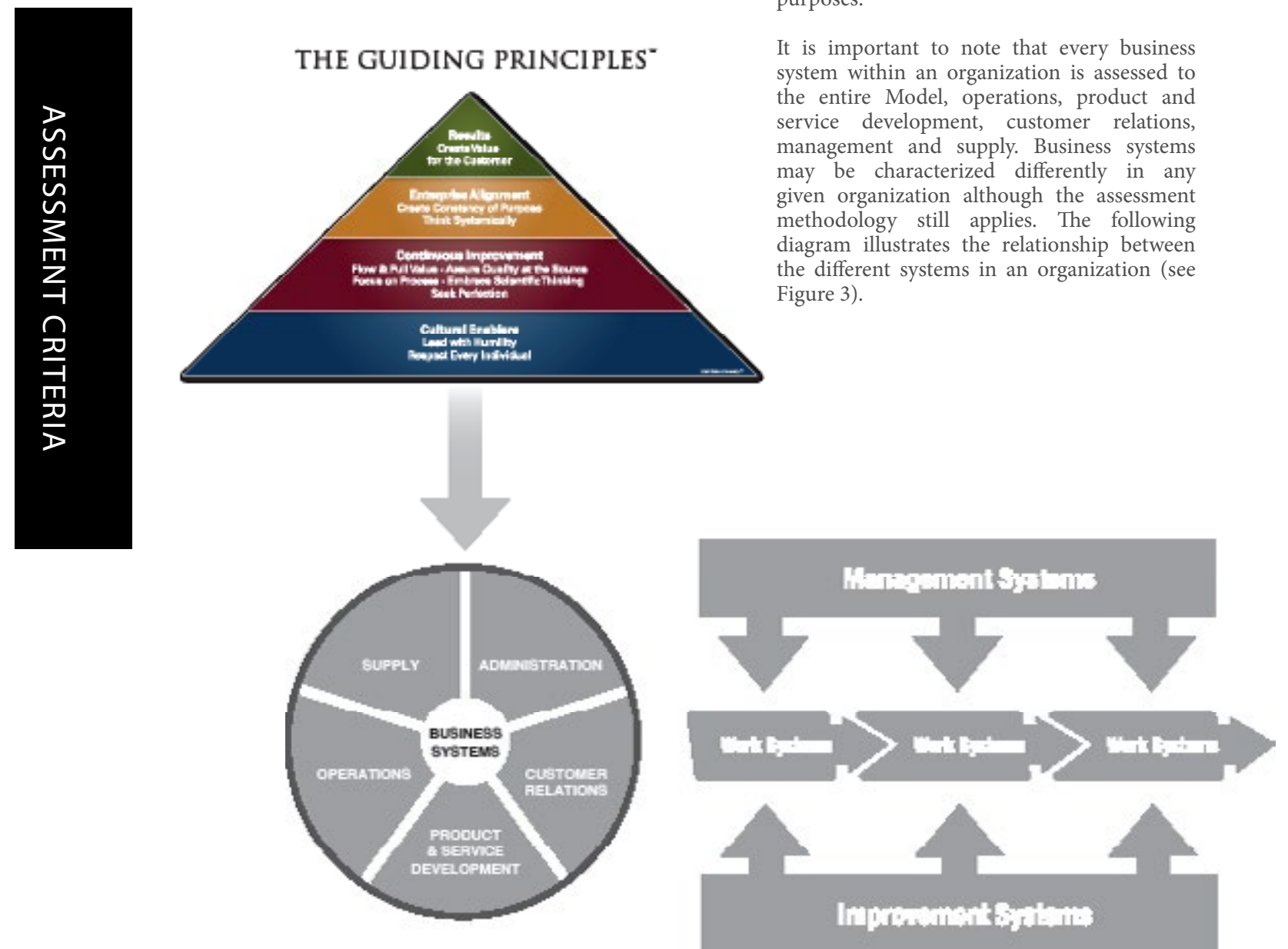


Figure 3: Systems Model

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

The following are examples of systems that drive behaviors and are aligned to principles as exemplified in the model (the first portion of this document). Some tools are also listed as examples. This is not intended to be a check list, nor is it all inclusive. Not all will be present in every organization, and organizations may have others not listed here. These are simply examples and provide organizations some guidance on what an assessment would evaluate.

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

Tools:

- Arrangements with educational institutions
- Personal development plans
- Lean training curriculum and materials
- Meetings/huddles
- Suggestion forms and measures
- Community open house
- Fundraisers

The following are examples of questions that examiners would be engaged in answering and understanding during an organizational assessment. Answers to these and other questions asked of leaders, managers and associates will provide examiners with an understanding of the culture of an organization. This is not intended to be a complete list; it is for guidance and learning purposes. Examiners will also evaluate the frequency, duration, intensity, scope and role of the behaviors that characterize the culture of an organization. The behavior assessment scale provided on page 53 of this document provides further understanding of this process.

Questions:

Open-ended questions directed toward leaders, managers, associates and other observations provide answers to the sample questions below. Once behavioral evidence is observed and collected by examiners, it is rated with the behavior assessment scale.

1. Is on-the-job coaching in lean practices a daily part of the culture?
2. Is formal lean training and education ongoing and updated?
3. Is there a process flow where suggestions are processed quickly and feedback is received by the originator?
4. Is the organization a safe and clean workplace where safety and environmental standards are continually improving?
5. Does the recognition system focus on performance that encourages ideal behavior; and is it frequent, timely and specific?

Dimension 2 – Continuous 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

The following are examples of systems that drive behaviors and are aligned to principles as exemplified in the Model (the first portion of this document). Some tools are also listed. This is not intended to be a check list, nor is it all inclusive. Not all will be present in every organization, and organizations may have others not listed here. These are simply examples and provide organizations some guidance on what an assessment would evaluate.

Systems:

- Voice of the customer
- Problem-solving (A3 Thinking, PDCA, DMAIC)
- Value stream analysis
- 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 – managing bottlenecks
- Systems that make the customer/supplier linkage visible throughout all stages of the process and encourage/require regular communication
- Design for manufacturability, testing, maintenance, assembly — i.e. making it simpler and easier to deliver best quality and quickest, most reliable response to the customer at the lowest cost
- Involve suppliers and customers in product/service design and continuous improvement
- Direct observation (go and see) and data-based decisions and actions
- Cellular design/layout
- Variety reduction

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Tools:

- Customer surveys
- Component standardization and modularity
- Standard operating procedures (SOP)
- Tools of quality (i.e. pareto charts, storyboarding, cause-and-effect diagrams, 5-whys, or similar problem-solving techniques)
- Benchmarking visit
- Right-sized equipment and facilities
- Production control boards
- Red tags
- Floor tape

The following are examples of questions that examiners would be engaged in answering and understanding during an organizational assessment. Answers to these and other questions asked of leaders, managers and associates will provide examiners with an understanding of the culture of an organization. This is not intended to be a complete list; it is for guidance and learning purposes. Examiners will also evaluate the frequency, duration, intensity, scope and role of the behaviors that characterize the culture of an organization. The behavior assessment scale provided on page 53 of this document provides further understanding of this process.

Questions:

Open-ended questions directed toward leaders, managers and associates and other observations provide answers to the sample questions below. Once behavioral evidence is observed and collected by examiners, it is rated with the behavior assessment scale.

1. Is the current state and future state an ongoing continuous cycle that is actively pursued with a visual, detailed action plan and timeline?
2. Are standards and work instructions simple and visual for all work processes? Are they updated with improvements routinely? Are they followed with regard to timing and sequence?
3. Are managers and supervisors routinely observing the actual process in order to gather factual data to understand the problems and opportunities?
4. Are improvements made by following a scientific method, PDCA, DMAIC, A3 thinking, etc.? Is there a coaching process in place for problem-solving? Are problems being addressed at the lowest possible level of the organization?
5. Are problems, defects and abnormal conditions signaled and stopped immediately at the point of occurrence and the root cause pursued?

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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

The following are examples of systems that drive behaviors and are aligned to principles as exemplified in the Model (the first portion of this document). Some tools are also listed. This is not intended to be a check list, nor is it all inclusive. Not all will be present in every organization, and organizations may have others not listed here. These are simply examples and provide organizations some guidance on what an assessment would evaluate.

Systems:

- Strategy deployment
- Daily management
- Assessment
- Communication
- Customer relationship management (CRM)
- Information technology
- Accounting/finance
- Measurement/scorecard
- Reporting/accountability

Tools:

- Daily management standard work sheets
- Surveys
- Meetings
- X-Matrix
- Mission statement
- Vision statement
- Goals
- Values
- Business models

The following are examples of questions that examiners would be engaged in answering and understanding during an organizational assessment. Answers to these and other questions asked of leaders, managers and associates will provide examiners with an understanding of the culture of an organization. This is not intended to be a complete list; it is for guidance and learning purposes. Examiners will also evaluate the frequency, duration, intensity, scope and role of the behaviors that characterize the culture of an organization. The behavior assessment scale provided on page 53 of this document provides further understanding of this process.



Questions:

Open-ended questions directed toward leaders, managers, associates and other observations provide answers to the sample questions below. Once behavioral evidence is observed and collected by examiners, it is rated with the behavior assessment scale.

1. Is there a structured process for aligning goals and strategic priorities that is simple and visible at all levels of the organization?
2. Do leaders hold to the guiding principles through hard times?
3. Are support functions seamlessly integrated to aid operations in creating value (process-based versus silo culture)?
4. Do information systems provide direct flow of pertinent information that is easily accessible and usable across the extended enterprise (no shadow systems or spreadsheets)?
5. Do leaders and managers have a standard work process that enables them to monitor and maintain company alignment?

Dimension 4 – Results (200 Points)

Guiding Principle:

Create Value for the Customer

Supporting Concepts:

Measure what matters
Align behaviors with performance
Identify cause-and-effect relationships

The following are examples of systems that drive behaviors and are aligned to principles as exemplified in the Model (the first portion of this document). Some tools are also listed. This is not intended to be a check list, nor is it all inclusive. Not all will be present in every organization, and organizations may have others not listed here. These are simply examples and provide organizations some guidance on what an assessment would evaluate.

Systems:

- Voice of the customer
- Strategy deployment
- Communications
- Visual management
- Management reporting

Tools:

- Huddles
- Control boards
- Score cards
- All employee meetings
- Surveys

The following are examples of questions that examiners would be engaged in answering and understanding during an organizational assessment. Answers to these and other

questions asked of leaders, managers and associates will provide examiners with an understanding of the culture of an organization. This is not intended to be a complete list; it is for guidance and learning purposes. Results will also be evaluated based on stability, trend/level, alignment and improvement usage. The measures assessment scale provided on page 54 of this document provides further understanding of this process.

Questions:

Open-ended questions directed toward leaders, managers, associates and other observations provide answers to the sample questions below. Once behavioral evidence is observed and collected by examiners it is rated with the behavior and measures assessment scale.

1. Are measures simple? Is there a common understanding of what is measured and why it is measured? Are measures directly tied to the organization's overall objective?
2. Are measures used to drive improvements?
3. Do performance measures drive the right behaviors?
4. Are tracking boards used routinely for open discussion and feedback so that adjustments can be made, and at what level?
5. Are principles, systems and tools aligned in such a way that guiding principles help align the systems to select appropriate tools to achieve performance targets?

4.A Quality

Strongly recommended measures:

- Quality to the customer (defect-free delivery)
- Finished product first pass yield and/or rework

Examples of other supporting measures that could be provided are

- Internal quality (quality within the plant)
- No disclosures (recalls later)
- Designs that meet customer needs
- Unplanned scrap rate
- Overall cost of quality
- Process variation measures
- Customer returns
- Supplier quality
- Warranty cost
- Other appropriate measures

4.B Cost/Productivity

Strongly recommended measures:

- Productivity of cash (cash flow)
- Key value stream margins
- Turns (of what is produced)

Examples of other supporting measures that could be provided are

- Cost per unit
- Labor hours per unit
- Labor productivity – organizational physical or financial output as compared to labor quantity
- Asset productivity (organizational output compared to value of physical assets employed)
- Inventory turns (organizational raw, working, and finished inventories compared to relevant total cost or revenue)
- Cost structure (reduction in key cost categories)
- Energy productivity (physical or financial output compared to energy cost or quantity)
- Resource utilization (floor space, vehicles,

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etc.) (high utilization without adverse effects on responsiveness)

- Return on investment
- Revenue per employee hour worked
- Portfolio value (new products and existing)
- Maintenance profiles (percent preventive for example)
- Other appropriate measures

4.C Delivery

Strongly recommended measures:

- On-time delivery complete to customer requested date
- Total lead time (the time from customer order to customer receipt, assuming no finished goods inventory)
- Processing cycle time (into process to out-of process)

Examples of other supporting measures that could be provided are

- Time from or to supplier to receipt of materials
- Customer awards, audits, and surveys
- Premium freight as percent of production costs
- Mis-shipments
- Warranty response and service
- Reorder rate
- Field performance data
- Backorder data
- System availability
- Other appropriate measures

4.D Customer Satisfaction

Strongly recommended measures:

- Market share
- Customer surveys

Examples of other supporting measures that could be provided are

- Success of new products
- New contract awards
- Share of category
- Customer retention
- Net promoter score
- Customer engagement in programs
- Measure of customer intent (awareness and consideration)
- Other appropriate measures

4.E Safety/Environment/Morale

Strongly recommended measures:

- Number of ideas per employee and degree of employee implementation of them
- Near misses
- Survey (measure of employee trust and confidence in organization and management)

Examples of other supporting measures that could be provided are

- Reportables
- Waste to landfill
- Recycling
- Emissions
- Energy consumption
- Utilization of high-potential talent
- Talent pipeline strength (succession planning)
- Other appropriate measures

ASSESSMENT AND SCORING

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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 measures assessment scale. Both scales are presented in the next few pages. Each dimension of the Model will be scored in the format below, the scoring matrix. As represented in the scoring matrix on the next page, the first three dimensions will be divided into three main categories for assessment purposes: leaders, operations and support. There are also two subcategories for assessment under operations and support. They are managers and associates. Weights have been assigned to each category. The assessment will provide a gap analysis that can be used to focus improvement activities. It will provide a baseline of cultural reality that will enable an organization to move forward on its journey toward building a culture of operational excellence.

The following illustration is representative of how an organization is assessed, the weights given, and points assigned to each dimension. In an effort to promote continuous improvement, the feedback received by an organization after a site visit will provide a level that the organization achieved in each area. This level can be compared with the assessment scales that are provided in this document (see Table 5).

Scoring Matrix		Senior Leadership	Operations		Support	
			Managers	Associates	Managers	Associates
Cultural Enablers (250 pts.)	Cultural Enablers					
	Weight	40%	20%	10%	20%	10%
Continuous Process Improvement (350 pts.)	Continuous Process Improvement					
	Weight	15%	35%	15%	25%	10%
Enterprise Alignment (200 pts.)	Enterprise Alignment					
	Weight	50%	20%	5%	20%	5%
Results (200 pts.)	Quality	Measures (20%)				
	Cost/Productivity	Measures (20%)				
	Delivery	Measures (20%)				
	Customer Satisfaction	Measures (20%)				
	Safety/Environment/Morale	Measures (20%)				

Table 5: Scoring Matrix

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Behavior – Assessment Scale

Senior leadership, managers and associates at the applying entity in 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? Examiners will be looking for behaviors and other indicators that define and describe the culture of the organization. The difference between the current culture and the ideal culture, the Shingo standard, is the gap that is identified for improvement focus.

Understanding the principles throughout the organization, establishing and executing systems that support these principles, and selecting and utilizing appropriate tools and techniques guide an organization to achieve its business plans and goals. Scoring is based on examiners' observations as they assess the facility. Examiners are trained to look for behaviors and performance. Behaviors and performance are taken into account in the scoring.

Articulating Behavior

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?

The following list of descriptors is the basis for assessing Cultural Enablers, Continuous Process Improvement and Enterprise Alignment.

Statement of Purpose: The purpose of our assessment is to determine the degree to which the behaviors in an organization align with the principles of operational excellence. Ideal behavior (Level 5) is represented as the standard for operational excellence.

Business systems that fully match the descriptors would score at the top of the indicated range (see Table 6).



Behavior Assessment Scale

Operational Excellence (Standard)					
Lenses	Level 1 0-20%	Level 2 21-40%	Level 3 41-60%	Level 4 61-80%	Level 5 81-100%
Role	Leaders are focused mostly on fire-fighting and largely absent from improvement efforts	Leaders are aware of other's initiatives to improve but largely uninvolved	Leaders set direction for improvement and supports efforts of others	Leaders are involved in improvement efforts and supports the alignment of principles of operational excellence with systems	Leaders are focused on ensuring the principles of operational excellence are driven deeply into the culture and regularly assessed for improvement
	Managers are oriented toward getting results "at all costs"	Managers mostly look to specialists to create improvement through project orientation	Managers are involved in developing systems and helping others to use tools effectively	Managers focus on driving behaviors through the design of systems	Managers are primarily focused on continuously improving systems to drive behavior more closely aligned with principles of operational excellence
	Associates focus on doing their jobs and are largely treated like an expense	Associates are occasionally asked to participate on an improvement team usually led by someone outside their natural work team	Associates are trained and participate in improvement projects	Associates are involved every day in using tools to drive continuous improvement in their own areas of responsibility	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
Frequency	Infrequent Rare	Event-based Irregular	Frequent Common	Consistent Predominant	Constant Uniform
Duration	Initiated Undeveloped	Experimental Formative	Repeatable Predictable	Established Stable	Culturally Ingrained Mature
Intensity	Apathetic Indifferent	Apparent Individual Commitment	Moderate Local Commitment	Persistent Wide Commitment	Tenacious Full Commitment
Scope	Isolated Point Solution	Silos Internal Value Stream	Predominantly Operations Functional Value Stream	Multiple Business Processes Integrated Value Stream	Enterprise-wide Extended Value Stream

Table 6: Behavior Assessment Scale

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Measures – Assessment Scale
The following list of descriptors is the basis for assessing the measures in the results section.

Measures that match the descriptors would score at the top of the indicated range (see Table 7).

Measures Assessment Scale

Lenses	Level 1 0-20%	Level 2 21-40%	Level 3 41-60%	Level 4 61-80%	Level 5 81-100%
Stability	Little to no evidence of stability Little to no predictability Beginning to implement Unpredictable 0-1 years		Has begun to stabilize Initiating predictability Building maturity All levels have become comfortable with the measures 2-3 years		Stable Predictable Long-term Mature 4+ years
Trend/Level	Level is low Trend is poor Little to no evidence of goals Little evidence to no evidence of benchmarking		Moderate improvement in level Benchmarking is industry-focused Trends are mostly positive to flat with some backsliding		High level of attainment considered world-class Benchmarks constantly raise the bar and are a function of process not industry Positive trend with very few anomalies to explain Trend is well above expectations
Alignment	Isolated with inconsistent usage of measures Little alignment Strong silos		Some areas aligned, other than operations Performance measures aligned in operations Silos are beginning to fall Working toward enterprise-wide alignment		All measures align to corporate goals and down to the lowest level Enterprise-wide extended value stream No silos
Improvement	Little to no systematic feedback Sporadic feedback Little evidence of goal setting some evidence in operations		Regular feedback in some areas All areas do not address feedback systematically Many areas beyond operations have a process to set goals		Routine feedback to appropriate party Evidence of feedback in all areas Almost all areas have goals that are realistic and challenging

Table 7: Measures Assessment Scale

APPLICATION PROCESS

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Application Process

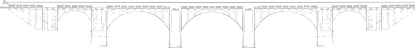
We have developed a three-tier award to enable organizations to challenge early on in their transformation journey using the Shingo assessment process to benchmark and improve their organizations along the way. The Shingo assessment provides valuable feedback from an impartial third party. When utilized, it can help accelerate the transformation process. Awards can be achieved at three levels: Shingo Bronze Medallion, Shingo Silver Medallion and the Shingo Prize.

We encourage organizations to take the opportunity to contact the office of the Shingo Institute well in advance of the date they plan to apply. This enables us to help with the process, answer questions and provide training. Applying early leaves ample time to execute a plan for the application process and to budget appropriately.

Because the *Shingo Model* focuses on cultural transformation, we strongly recommend as many associates as possible to go through the following training program before an organization applies. The workshop, Discover Excellence, is available to the public, or for maximum effectiveness and participation, the workshop can be delivered on-site at your facility. This workshop has been critical for providing a common understanding of the *Shingo Model* and the assessment process. The training workshop is described below:

Discover Excellence

Workshop participants will gain an understanding of the *Shingo Model* and the underlying principles behind the Shingo philosophy and approach. Participants will learn and gain experience in aligning your organizational principles and core values with your systems. There will be group activities that help develop skills in assessing alignment



and also how to address misalignments by embedding your principles into your work and management systems.

In addition, participants will develop a comprehensive working knowledge of the Shingo Prize assessment criteria, which includes methods for assessment of the progress an organization has made in its lean transformation. By completing this training, participants will learn how to use the *Shingo Model* and assessment criteria to complete internal self-assessment that will clearly identify areas for focus and improvement in the entire organization.

For detailed information on this workshop and other available training opportunities for leaders and managers specific to the *Shingo Model*, please visit our website at www.shingo.org or call our office at (435) 797-2279.

Although we will make every attempt to accommodate other languages, the official language of the Shingo Institute is English. This means all training, materials, feedback and communications are performed in English. Exceptions may be when we have an instructor that speaks a preferred language.

Eligibility Requirements

An entity interested in challenging for the Shingo Prize must meet the following eligibility requirements:

- Applying entities may be from any industry including, but not limited to: services, manufacturing, healthcare and the public sector. An entity should have common ownership throughout the application (e.g. a manufacturer and supplier, not operated or owned by the same company) should each apply as a separate entity
- An entity should be in business long enough to establish stability
- An applying entity may not be in bankruptcy proceedings or knowingly considering such. This would include significant restructuring or reduction in operations
- An applying entity may not be under investigation by any government or private

entity for malfeasance

- An applying entity must be able to show measures that are specific to the applying entity (divisional or corporate metrics are not sufficient). A minimum of three full years of data is required. Most measures should show trends and levels and be tied to improvements. Examiners will be evaluating level, trend and the correlation between improvement activities and the reported results. It is expected that lean initiatives will have an impact on the bottom line. Keep in mind that the Shingo assessment evaluates the entire applying entity to the Model as detailed below. If documentation of three full years of measures is an issue, it should be discussed with the Shingo Institute before preparing the achievement report. Further explanation of measures is provided below in Dimension 4 – Results
- An applying entity may be eligible to challenge as a large or small organization. Achievement qualifications are the same for each; and since organizations are not competing against each other, reference to an organizations size is useful only for purpose of pricing and planning for examination teams (see Table 8).

Small Organization	Large Organization
250 people or less in entire enterprise	More than 250 people
Not part of a larger organization	250 people or less if part of a larger organization
	Government entities
	Large organizations may need to be broken up into multiple applications

Table 8: Organization Size

Questions regarding eligibility must be clarified through the Shingo Institute during the application process, prior to writing and submitting the achievement report. The application and profile sheets help to evaluate eligibility.

Re-Applications

Re-applications are encouraged for the following circumstances:

- No recipient status was awarded on the last application
- Bronze or Silver Medallion status was awarded on the last application, and the entity wishes to attempt to advance its status (in general it will take at least two full years of intense focus and commitment between challenges to show the improvements necessary to advance)
- The Shingo Prize was awarded and the entity is ready to renew its award status, which expires after five years for Shingo Prize recipients and three years for Bronze and Silver Medallion recipients

Re-applications must relate to substantially the same entity as the original application. A new application and achievement report must be submitted. The achievement report for re-application should highlight the achievements made since the last challenge supporting a bid to re-challenge. Please use the re-application form that is available at www.shingo.org.

Application Forms and Profile Sheets

An application form and profile sheet should be sent to the Shingo Institute as soon as an applicant decides to pursue an award at any level, even if the intended achievement report submission date is up to one year out. The intent of the application is to help us plan our workload and assist the applicant through a smooth process. A two-page (maximum) company profile sheet should be formatted according to examples provided at www.shingo.org. **Please do not include any confidential or classified information in the profile sheet, as it may ultimately be posted to the Shingo website or provided to the media.** Sample forms are available at www.shingo.org.

Application forms should also be accompanied by information pertaining to Dimension 4 – Results. Results should be provided in each section, quality, cost/productivity, delivery, customer satisfaction and safety/environment/morale. Please provide enough data so that an analysis of stability is possible. Provide as much data as possible especially if it is data that shows performance before lean implementation began. There is a minimum data requirement of three years. Provide each measure at the level of aggregation where it is most used by management (monthly at the least). Charts representing measurement and improvement are best displayed with the shortest interval possible. Averaging over months, quarters or years may mask information that could otherwise be very useful. **If acronyms are used, please explain each along with the calculation used for each measure.**

The graph on the following page (see Figure 4) is an example that might be included in the report.

The application, profile sheet and applying entity's results will be processed as received and should be approved prior to writing the achievement report. This ensures there are no eligibility issues and that we have addressed all of the applicant's questions and concerns early on. A completed and approved application form is due before the achievement report is sent. A notice of eligibility confirmation will be sent to the applying entity. Please note that the applying entity's results sections are not analyzed at this point in the process.

There are no fees due at this point in the process.

Where to Apply

Applications, profile sheets and other documents must be e-mailed to Shaun Barker at shaun.barker@usu.edu and Amy Sadler at amy.sadler@usu.edu. Please contact Shaun with any questions you may have via email or by phone at (435) 797-3815.

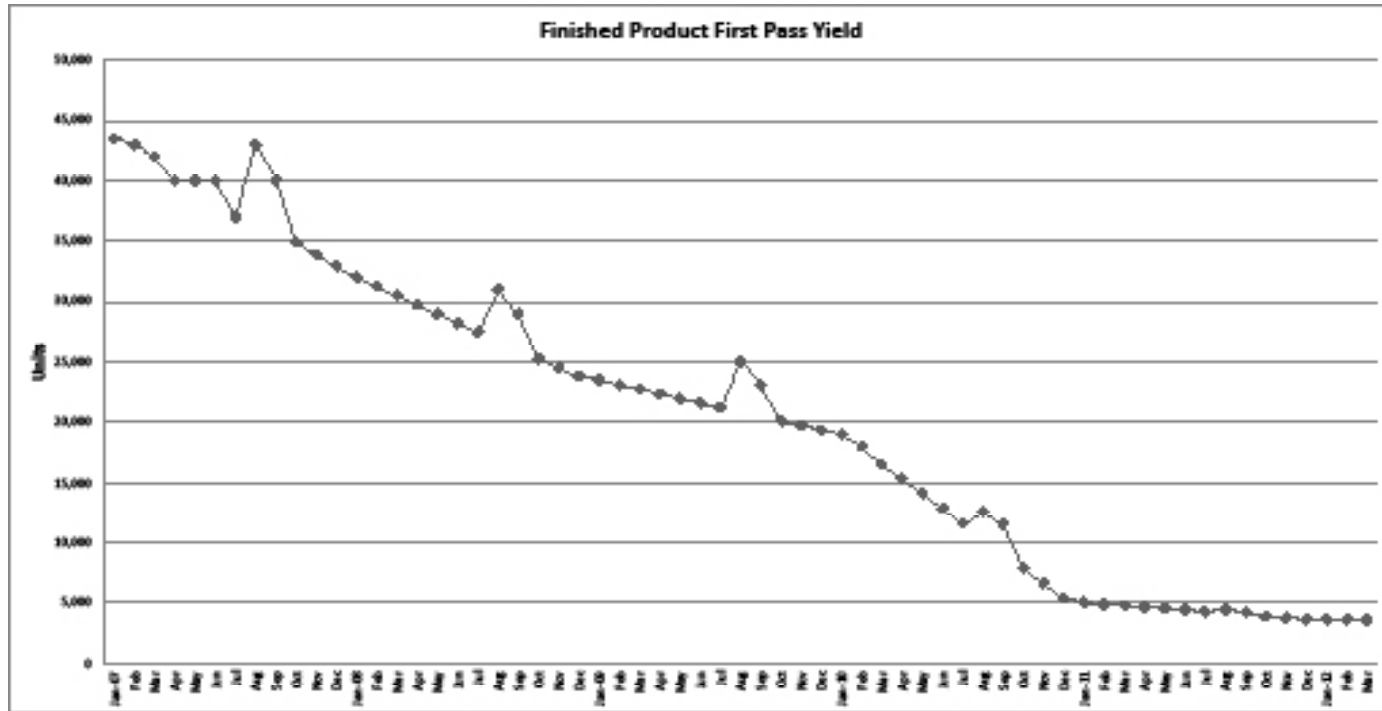


Figure 4: Finished Product First Pass Yield

Achievement Reports

Achievement reports should be written after the application is approved, ensuring an applying entity is eligible to proceed. Achievement reports will be accepted any time throughout the year. Achievement reports not received in time to be processed before the Annual International Shingo Conference and Awards Ceremony (usually held in April or May) will be recognized at the following year's ceremony.

Applicants will be advised of an approximate process time-table based on the date the achievement report is received and that the work is in-process. If an application cannot be processed in time for the next Conference and Awards Ceremony, the application will become part of the following year's applications. Please submit the achievement report early if you are concerned about a specific conference date. An application fee of \$6,000 for large organizations or \$3,000 for small organizations must be submitted with the achievement report. For payment information, please call the Shingo Institute at (435) 797-2279.

Site Visit Assessments

Site visit assessments will be scheduled as soon as possible after a site visit is awarded based on the achievement report review. Candidates being considered for any level of recognition through the Shingo Institute will receive a site visit assessment by an examination team based on final review of the achievement report. An average large facility will require five to eight examiners.

Site visits will be scheduled throughout the year and are dependent on the applicant's achievement report submission date and availability of the site and examiners for an assessment. Site visits not scheduled in time to process before the Annual International Shingo Conference and Awards Ceremony will be recognized at the following year's ceremony.

The primary objective of the site visit assessment is to verify, clarify and amplify the information contained in the achievement report. In terms of clarification, companies should be prepared with updated measures reported in their achievement report during the site visit assessment.

APPLICATION PROCESS

Applicants will be notified whether or not a site visit will be awarded approximately 30 days after the achievement report is received. Applicants awarded a site visit will be contacted to make arrangements. Applicants awarded a site visit are required to pay an additional site visit fee. The cost of each site visit assessment is based in part on the nature, size, and location of the applying entity and the number of examiners needed. Fees generally average between \$10,000 and \$20,000 for a single organization utilizing four to eight site visit examiners. Small organizations may have lower fees depending on the size of the facility, the product or service, and the number of examiners needed to evaluate the facility. The invoice is for a site visit fee and will not be broken down in any more detail than the total fee. International applications will be subject to additional fees to cover additional expenses. These fees will be determined during the application eligibility process. International applications will be expected to pay the estimated site visit fee prior to the visit.

Site visit fees within North America will be invoiced and sent to the applying entity within 30 days of the site visit. Payment is due upon receipt.

All examiners are required to sign a non-disclosure agreement that is kept on file at the Shingo Institute. Examiners are assigned in such a manner that conflicts of interest are avoided. Each applicant will receive a list of examiners who will be involved on a site visit assessment. The applying organization will be asked for written authorization for all examiners that participate on the site visit assessment. Organizations that have representatives on the Shingo Institute Advisory Council or are Shingo Examiners are allowed to challenge, but their representative will be disqualified from participation in the assessment, review and selection processes.

Applicants are asked not to divulge proprietary information regarding products, processes or sensitive financial results. Our interest is in operational excellence, and we do not require this information. Please do not include any confidential information in your achievement report or other documents sent to the Shingo Institute. Please do send information you feel

will be helpful to examiners in assessing the cultural transformation of your organization.

Recipient Recognition Opportunities

Once an award level is determined, a recipient has many opportunities to be recognized for its achievements. All recipients from around the world will be recognized officially and publicly at the Annual International Shingo Conference and Awards Ceremony (usually held in April or May). Recipients will be recognized through press releases and announcements on social media sites. The Shingo Prize recipients are posted on the Shingo Institute website for five years, and Shingo Silver Medallion and Bronze Medallion recipients are posted for three years. Recipient companies may tell their transformational story through potential speaking opportunities at the Shingo Conference, and they can also gain exposure by providing guided tours for the Shingo Institute.

Application Timeline

The Shingo Prize application and assessment process includes the following six steps:

1. An application form, profile sheet and results should be sent to the Shingo Institute as soon as an applicant has decided to challenge for the Shingo Prize.

Preferred timing: One year before intended achievement report submittal

2. Achievement reports are submitted and reviewed. Achievement reports should be written according to the instructions found in the "Writing the Achievement Report" section (see below). Application and re-application fees are due along with the achievement report (see fees section below).

Approximate lead time for achievement report review: 30 days



3. Achievement reports with appropriate recommendations from examiners will receive a site visit assessment.

Preferred timing for a site visit: 45 to 60 days after applicant notification

4. Based on the site visit assessment results, the Board of Examiners will recommend the applicant to the Executive Committee for: no award level, the Shingo Bronze Medallion, the Shingo Silver Medallion or the Shingo Prize. Applicant will be invoiced a site visit examination fee directly after the visit (see approximate fees below).

Approximate lead time for the feedback report: 30 days

5. The Executive Committee reviews the recommendations. Organizations will be notified of their status in approximately 30 days after the site visit assessment. Decisions made by the committee are final and not subject to appeal. Applicants will receive a written feedback report after status notification.

6. After an award level has been determined, a recipient may invite, at the recipient's expense, a member of the Shingo staff to present the award at a local celebration. This is best done after the public recognition occurs; but if the time between the recognition and the Shingo Conference is too great, an organization may schedule it to suit their purposes. All recipients from around the world will be recognized publicly at the Annual International Shingo Conference and Awards Ceremony.

The times given are approximate and subject to change depending on many factors, including workload in the Shingo Institute office. Please do not use these times to estimate whether or not your application will be completed in time for a specific Awards Ceremony. The staff at the Shingo Institute will advise you if timing is in question upon your application submittal.

Fees

Fees are due with the achievement report. Applicants will be invoiced within 30 days after the site visit. The invoice is for a site visit fee and will not be broken down in any more detail than the total fee. International applications will be subject to additional fees. These fees will be determined during the application eligibility process and an estimated fee will be collected before a site visit occurs (see Table 9).

Application	Re-Application	Site Visit
Small Organization \$3,000	Small Organization \$3,000	\$10,000-\$20,000
Large Organization \$6,000	Large Organization \$6,000	\$10,000-\$20,000

Table 9: Fees

WRITING THE ACHIEVEMENT REPORT

The achievement report is the document for determining whether or not an applicant is awarded a site visit. A Shingo Prize applicant must prepare an achievement report that demonstrates how the organization has transformed its culture based on the principles of operational excellence represented in the *Shingo Model*. The achievement report should also address frequency, intensity, duration, scope and role of the behaviors that are apparent in the current culture of the applicant.

The achievement report should be written according to the format below. This format focuses on each dimension of the Model and should include information about individual business systems and their achievements. Please note that if a site visit is conducted, all business systems will be assessed to all dimensions of the model in much the same way. The business systems include senior leadership, customer relations, product/service development, operations, supply and management support processes.

The achievement report should follow the outline provided. Each dimension should address the application of principles, systems (selection, development, and effectiveness) and choice and use of tools and techniques. The required measures under Dimension 4 – Results are considered essential for all organizations. Results should be addressed in terms of stability, trend and level, alignment and improvement. An applicant should also include any measurements that assist in controlling and improving basic business systems: senior leadership, customer relations, product/service development, operations, supply and management support processes. Applicants should explain and support their choice of measures. It is important that all five categories of measurements are addressed. The intent of this dimension is for the applicant to provide information to the examiners about

how the organization selects what to measure and how measurements are used to drive improvement. It should also show results of the lean implementation and where the applicant stands relative to best-in-class. Include information that helps examiners understand how the cause-and-effect relationship between measures and results is taught and understood by all associates. It is important that results in the achievement report are understandable and have explanations where needed. Please refer to Dimension 4 – Results, in the Model handbook for complete details on measures.

Applicants are asked not to divulge proprietary information regarding products, processes or sensitive financial results. Our interest is in operational excellence, and we do not require this information. Please do not include any confidential information in your achievement report or other documents sent to the Shingo Institute.

Keep in mind that this report is being reviewed by a team of examiners from a diverse group of industries. They are very experienced in lean but most likely are not experienced with your organization. Please do not assume that acronyms and organizational language will be understood. Flow, clarity and conciseness of the report are important; generally, 50 pages is the maximum length. The intent of this report is to tell the examiners your cultural transformation story as simply and efficiently as possible. Please make sure that if photos are included in the report, they are high impact, legible and of good quality.

The achievement report is about the applying entity, not the overall organization. **Please limit references to the overall organization to areas that are applicable and critical** (i.e. if you are trying to show alignment of strategy or constancy of purpose). **Measures should be specific to the applying entity. Reports with excessive reference to the overall organization may be returned to the applicant. Examiners cannot evaluate an applicant based on information about an entire organization when the applying entity is really a sub-set.**

The achievement report should include, in the first pages before the table of contents, a copy of the application form.

The report must be printed on:

- 8½ x 11-inch paper using a fixed-pitch font of 11 characters per inch
- Sheets should be double-sided, single spaced
- The report is generally limited to a maximum length of 50 printed pages
- The report should be coil bound
- The official language of the achievement report is English

Ten (10) hard copies and one (1) digital copy on a CD or thumb drive of the achievement report, meeting all above-stated criteria and format requirements, can be turned in up to one year after the application has been approved.

Achievement Report Format

While writing the achievement report, remember to be specific about the business system you are referring to (i.e. senior leadership, customer relations, product/service development, operations, supply and management support processes). The achievement report should discuss the assessment criteria detailed earlier in this document. Principles, systems and tools have been clearly defined for each dimension of the Model.

Introduction

The introduction allows an organization to highlight some of its strengths and share a brief company overview. The company profile sheet may be used in this section, see www.shingo.org for examples.

Dimension 1 – Cultural Enablers

In this dimension an organization should describe its cultural enablers as they relate to the principles in the *Shingo Model*. Care should be taken to sufficiently describe how your organization's systems and practices drive principle-based (ideal) behavior in each subsection. Clearly discuss examples of tools, systems and principles in each of the business systems.

Dimension 3 – Enterprise Alignment

In this dimension an organization should describe its lean culture as it relates to the principles in the *Shingo Model*. Care should be taken to sufficiently describe how your organization's systems and activities drive principle-based behavior in each business system. Clearly discuss examples of tools, systems and principles.

Dimension 2 – Continuous Process Improvement

Describe your organization's philosophy toward applying lean principles and concepts. At Toyota, this would be a description of the Toyota Production System. Continuous process improvement will be evaluated in part based upon how well your organization implements its philosophy across all the business systems.

Dimension 4 – Results

There are five main internal measurement areas for operational excellence: quality, cost/productivity, delivery, customer satisfaction and safety/environment/morale. Each area has its own strongly suggested measures and supporting measures detailed earlier in this document.

Include the following items in the report:

- Describe your organization's philosophy toward creating value as it relates to the principles in the *Shingo Model*
- Provide the measures used in each measurement area defined above. Report anything that is used effectively to drive improvement in the organization
- The measures will be submitted with the application and profile sheet. This section in the achievement report will be significantly more detailed than the measures that were submitted with the application. All categories in this section must be addressed either with a measurement and the discussion points below or a full explanation of why a particular category is not measured

Discussion of each measure should contain:

- A clear definition of the measure and its computation
- The trend and level of performance in each area as compared to benchmarks or goals
- Why the measure is the appropriate measure for that subsection or category
- Any major technical adjustments that have been made to the measure
- How the measure is used to stimulate improvement
- What key activities "move the dial" on that metric

Please provide enough data so that an analysis of stability is possible. Provide as much data as possible; especially, if it is data that shows performance before lean implementation began. Provide each measure at the level of aggregation where it is most used by management (monthly at the least). It is possible that examiners may ask for a less aggregated version of specific data. Charts representing measurement and improvement are best displayed with the shortest interval possible. Averaging over months, quarters or years may mask information that could otherwise be very useful. When data is obviously collected and used weekly, don't average it into monthly or annual figures for the purposes of this report. Please use appropriate scales. Provide the data as you would normally use it.

All measurement categories must be covered – quality, cost/productivity, delivery, customer satisfaction and safety/environment/morale – and include a minimum of three years of data.

Applicants are asked not to divulge proprietary information regarding products, processes, or sensitive financial results. Our interest is in operational excellence, and we do not require this information. Please do not include any confidential information in your achievement report or other documents sent to the Shingo Institute.

The Shingo Prize

2016
Boston Scientific Cork
Cork, Ireland

Rexam Beverage Can Americas S.A.
de C.V.
Querétaro, Mexico

2015
Abbott Diagnostics Longford
Longford, Ireland

Envases Universales Rexam de
Centroamerica, S.A.
Amatitlan, Guatemala

2014
Abbott Vascular
Clonmel, Tipperary, Ireland

Barnes Aerospace OEM Strategic
Business
Ogden, Utah, USA

DePuy Synthes Ireland
Cork, Ireland

NewsUK - Newsprinters Ltd
Holytown, Motherwell, UK

2012
Ethicon Inc.
Juarez, Chihuahua, Mexico

Rexam Beverage Can, Águas Claras Cans
Águas Claras, Rio Grande do Sul/Viamão,
Brazil

APPLICATION PROCESS

The Shingo Prize is awarded to organizations that demonstrate a culture where principles of operational excellence are deeply embedded into the thinking and behavior of all leaders, managers and associates.

Performance is measured both in terms of business results and the degree to which business, management and work systems are driving appropriate and optimum behavior at all levels. Leadership is beginning to focus on ensuring that principles of operational excellence are deeply imbedded into the culture and regularly assessed for improvement.



Shingo Silver Medallion

Shingo Bronze Medallion

2016
Hospira Limited, a Pfizer Company
Haina, San Cristobal, Dominican Republic

Meda Rottapharm, Ltd - a Mylan Company
Dublin, Ireland

2015
Commonwealth Bank of Australia, Collections & Customer Solutions
Sydney, New South Wales, Australia

2014
Boston Scientific, Maple Grove
Maple Grove, Minnesota, USA

PyMPSA Plásticos y Materias Primas
Guadalajara, Jalisco, Mexico

Rexam Beverage Can, Enzesfeld
Enzesfeld, Vienna, Austria

Rexam Beverage Can South America, Jacareí
Jacareí, São Paulo, Brazil

Rexam Healthcare, Neuenburg
Neuenburg am Rhein, Germany

Vale Europe Ltd., Clydach Refinery
Clydach, Swansea, UK

2013
MEI Queretaro
El Marques, Querétaro, Mexico

Pentair Water Pool and Spa
Moorpark, California

Rexam Beverage Can South America, Manaus Ends
Manaus, Amazonas, Brazil

Rexam do Brasil Ltda Extrema Can Plant
Extrema, Minas Gerais, Brazil

Visteon Climate Systems India Ltd
Bhiwadi, Alwar, Rajasthan, India

Visteon Electronica Mexico - Saucito Plant
Chihuahua, Chihuahua, Mexico

2012
Pentair Technical Products
Reynosa, Tamaulipas, Mexico

Tobyhanna Army Depot, COMSEC
Tobyhanna, Pennsylvania, USA

Visteon Electronica Mexico - Carolinas Plant
Chihuahua, Chihuahua, Mexico

2015
Boston Scientific, Costa Rica
El Coyol, Alajuela, Costa Rica

Carestream Health, Yokneam
Yokneam, Israel

Lake Region Medical
New Ross, Wexford, Ireland

2014
Autoliv (China) Inflator Co., Ltd.
Shanghai, China

Corporation Steris Canada
Québec, QC, Canada

Lundbeck Pharmaceuticals Italy S.p.A.
Padova, Italy

Rexam Beverage Can South America, Rio de Janeiro
Rio de Janeiro, Brazil

Vistaprint Deer Park Australia
Derrimut, Victoria, Australia

2013
Covidien
Athlone, Ireland

Letterkenny Army Depot, Force Provider
Chambersburg, Pennsylvania, USA

Regeneron Pharmaceuticals Inc. (IOPS)
Rensselaer, New York, USA

Rexam Beverage Can South America, Cuiabá Cans
Cuiabá, Mato Grosso, Brazil

Starkey de Mexico S.A. de C.V.
Matamoros, Tamaulipas, Mexico

2012
Johnson Controls Lerma Plant
Lerma, Mexico

Lake Region Medical Limited
New Ross, Co. Wexford, Ireland

Remy Automotive Brasil Ltda.
Brusque, Santa Catarina, Brazil

State Farm Life Insurance Company, Operations Center
Bloomington, Illinois, USA

The Shingo Silver Medallion is awarded to organizations that demonstrate strong use of tools and techniques, have mature systems that drive improvement and are beginning to align thinking and organizational behavior with correct principles of operational excellence.

At the silver level the scorecard has a broad spectrum of measures and is beginning to include behavioral elements. Key measures are stable with mostly positive trends and all levels understand how to affect the measures appropriately for their areas.



The Shingo Bronze Medallion is awarded to organizations that demonstrate strong use of tools and techniques for business improvement and are working to develop effective systems to create continuity and consistency of tools application throughout the business entity.

Key measures have begun to stabilize with trends being mostly positive with some backsliding still evident. There are goals being set in many areas outside of operations. Alignment may still be weak in areas other than operations, but efforts are being made to improve and work toward aligning the entire enterprise. Silos are beginning to fall.

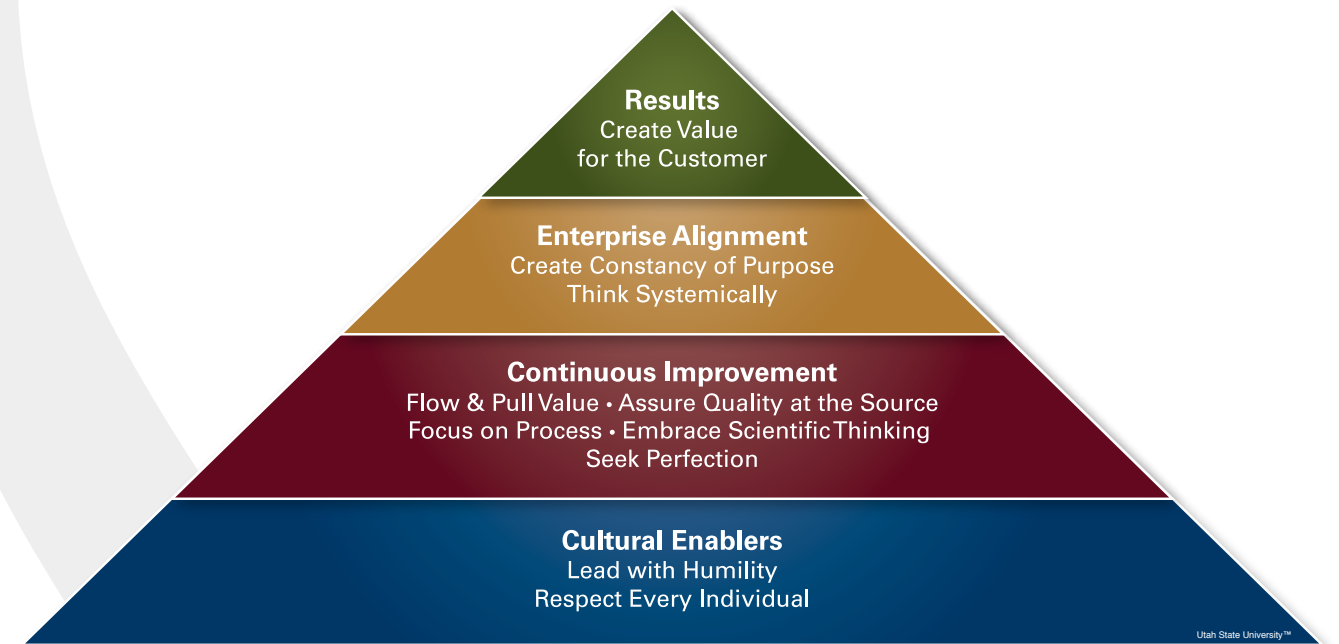


THE SHINGO MODEL™



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THE GUIDING PRINCIPLES



THREE INSIGHTS OF ENTERPRISE EXCELLENCE™

1. Ideal Results Require Ideal Behavior
2. Purpose and Systems Drive Behavior
3. Principles Inform Ideal Behavior

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The Shingo Professional Publication Award

2017

The Toyota Way to Service Excellence
Jeffrey K. Liker and Karyn Ross

The GBMP Management Engagement DVD Series
Bruce Hamilton

2016

2 Second Lean
Paul Aker

How to Do a Gemba Walk
Michael Bremer

Achieving Safe Health Care
Jan Compton

Lean-Driven Innovation
Norbert Majerus

Building the Fit Organization
Daniel Markovitz

The Lean Farm
Ben Hartman

Card-Based Control Systems for a Lean Work Design
Matthias Thürer, Mark Stevenson and Charles Protzman

Lean for the Long Term
William H. Baker, Jr. & Kenneth Rolfes

Developing Lean Leaders
Jeffrey K. Liker

Management on the Mend
John Toussaint

The Shingo Professional Publication Award recognizes and promotes writing that has had a significant impact and advances the body of knowledge regarding operational excellence. Awards are given in two categories: 1) New knowledge and understanding of operational excellence, 2) Extension of existing knowledge and understanding of operational excellence. The types of accepted submissions include: (1) books (monographs), (2) published articles, (3) case studies and (4) applied publications/multimedia programs.

