

# THE **SHINGO** MODEL

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*for Operational Excellence*



*Create Value for the Customer*

## Results

*Measure what Matters  
Align Behaviors with Performance  
Identify Cause & Effect Relationships*

*Create Constancy of Purpose  
Think Systemically*

## Enterprise Alignment

*See Reality  
Focus on Long-term  
Align Systems  
Align Strategy  
Standardize Daily Management*



*Focus on Process  
Embrace Scientific Thinking  
Flow & Pull Value  
Assure Quality at the Source  
Seek Perfection*

## Continuous Process Improvement

*Stabilize Processes  
Rely on Facts & Data  
Standardize Processes  
Insist on Direct Observation  
Focus on Value Stream  
Keep it Simple & Visual  
Identify & Eliminate Waste  
No Defects Passed Forward  
Integrate Improvement with Work*

*Lead with Humility  
Respect Every Individual*

## Cultural Enablers

*Assure a Safe Environment  
Develop People  
Empower & Involve Everyone*

™ The Shingo Prize

**GUIDING PRINCIPLES**

**SUPPORTING CONCEPTS**



## Mission

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**The mission** of The Shingo Prize for Operational Excellence is to create excellence in organizations through the application of universally accepted principles of operational excellence, alignment of management systems and the wise application of improvement techniques across the entire organizational enterprise. We do this by teaching correct principles and new paradigms that accelerate the flow of value, align and empower people and transform organizational culture.

## Vision

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**Our vision** is to be the global standard of excellence in every industry; because The Shingo Prize roots are in organizational recognition, we have learned three very important principles:

### **Key insights from 25 years of organizational assessment**

1. Evaluating organizations for recognition requires a clearly defined, very high and universally consistent standard of excellence.
2. True excellence cannot be fleeting; therefore, assessment must determine the degree to which the principles that create excellence are deeply embedded into culture.
3. For any organization to be successful, they must be able to see the truth about where they are in the development of a high-performing, principle-based culture.

Select organizations with whom The Shingo Prize for Operational Excellence has engaged:

### **Healthcare**

Christie Clinic  
Cleveland Clinic  
Denver Health  
Lehigh Valley Healthcare  
ThedaCare Center for Healthcare Value  
Toyota Memorial Hospital  
Martin's Point Health Care

### **Service**

Export Development Canada  
Overstock.com  
Royal Bank of Scotland  
State Farm Life Insurance  
Stephen Covey Group  
Verizon  
UL

### **Manufacturing**

Autoliv  
The Boeing Company  
Boston Scientific  
Baxter Healthcare  
Caterpillar Inc.  
Daimler  
Delphi  
GE  
Goodyear  
Jaguar Land Rover  
John Deere  
Johnson & Johnson  
Leyland Trucks  
Lockheed Martin  
Lundbeck  
OC Tanner  
Pentair  
Rexam  
US Synthetic  
Visteon

# Forward

## Dear colleagues and friends,

In my associations, many people have asked the following questions: How did The Shingo Prize come about? How has it arrived where it is today? And what does the organization actually do?

As we release this new book, I'd like to take the opportunity to tell you the brief version of our story. My hope is that the given context will provide you with additional value as you study the Shingo model and implement it as part of your organization's cultural transformation.

## The Beginning

Few individuals have contributed as much to the development of the ideas we call TQM, JIT and lean as did Shigeo Shingo. Over the course of his life, Dr. Shingo wrote and published 18 books, eight of which were translated from Japanese into English. Many years before they 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-minute exchange of dies" (SMED) and going to the actual workplace to grasp the true situation there. He worked extensively with Toyota executives, especially Mr. Taiichi Ohno, who

helped him to apply his understanding of these concepts in the real world.

Always on the leading edge of new ideas, Dr. Shingo envisioned a collaboration with an organization that would further his life's work through research, practical-yet-rigorous education and a program for recognizing the best in operational excellence throughout the world. In 1988, Shingo received his honorary Doctorate of Management from Utah State University and, later that year, his ambitions were realized when The Shingo Prize for Excellence in Manufacturing was organized and incorporated as part of the university. In 2007, the organization was renamed The Shingo Prize for Operational Excellence due to its relevance within every industry – not exclusively the area of manufacturing.

## Guiding Principles and Shifting Paradigms

One of Dr. Shingo's little known, but perhaps most important contributions, was his understanding of the relationship between concepts (principles), systems and tools. Unfortunately, over the years, most of us have gravitated to and exalted the tools associated with effective operations and have paid too little attention to the power of the principles. Dr. Shingo taught that understanding the principles behind the tools leads to higher-order thinking and answers the question, "why?" When people

understand more deeply the why behind the how and the what, they become empowered to innovate and take individual initiative. As more and more people within a single organization begin to act independently based on their understanding and commitment to the principles, culture begins to shift.

This fundamental truth is the basis for The Shingo Prize and the Shingo model.

Building on the work of Dr. Shingo, the mission of The Shingo Prize is to assist organizations of all kinds to create lasting cultures of operational excellence. We achieve our mission by focusing our efforts on timeless and universal principles.

As part of our efforts, we teach five fundamental paradigm shifts:

1. Operational excellence requires a focus both on results and behaviors.
2. Ideal behaviors in an organization are those that flow from the principles that govern the desired outcomes.
3. Principles construct the only foundation upon which a culture can be built if it is to be sustained over the long-term.
4. Creating ideal, principle-based behaviors requires alignment of the management systems that have the greatest impact on how people behave.

5. The tools of lean, TQM, JIT, Six Sigma, etc. are enablers and should be strategically and cautiously inserted into appropriate systems to better drive ideal behavior and excellent results.

All Shingo recognition is based on the degree to which these paradigms are broadly understood and deeply embedded into the behavioral fabric of an organization, top-to-bottom and side-to-side.

### **The Shingo Standard: A Story**

The Shingo standard is, by design, the most rigorous in the world. We believe Dr. Shingo would only want to associate his name with the very best. Applicants for recognition are held to an identical standard no matter where they are located in the world.

Our standard has not always been so high. For 18 years The Shingo Prize evaluated organizations by noting their application of lean tools, the quality of their lean program deployment and, to some degree, the engagement of their management teams. This process consistently resulted in eight to 10 organizations receiving The Shingo Prize each year. All was fine until we realized that it wasn't.

We began to see small signs of fracture along the edges. Critics of our selection process began to emerge in blogs and websites and eventually began to confront us directly. There is an adage that states, "Your best friends are the ones that tell you the truth, even when it is hard to hear."

Fortunately, we had very good friends in the Association for Manufacturing Excellence (AME) and the Society of Manufacturing Engineers (SME). They told us they were beginning to lose confidence in recommending, *carte blanche*, our recipients as benchmarking sites for their members. As much as this hurt, it forced us to begin a deep and earnest assessment of our past recipients; specifically, which ones had sustained their improvements and which ones had lost ground. Our findings were alarming!

We learned that even the best of the best had an extremely difficult time sustaining the gains we had observed during their assessments. Furthermore, we discovered that our assessment criteria had two major flaws: (1) our standard for what excellence looked like was based too much on outward appearance and not enough on the deeply embedded culture of the organization, and (2) we did not know how to accurately evaluate and measure the truth regarding an organization's culture.

Our insights sparked a yearlong study to determine what did and did not work in sustaining improvement efforts and to understand the reasons behind success or failure. At the same time, we began to dig back through all of Dr. Shingo's books to see if we could discover what it was that we were missing. To our surprise and delight, working from either end and toward the middle, we arrived at a unanimous conclusion. The difference between successful and unsuccessful efforts was

always in the organizations' ability to get past the tools, events and programs and to align management systems with principles. When such alignment took place, ideal behaviors followed and perpetuated a deep culture of operational excellence.

Based on our findings, we developed the Shingo model that consists of an organized collection of guiding principles (the House) and a transformation process (the Diamond). Together, this framework has become the basis for everything we do.

### **Education, Assessment and Recognition**

The Shingo Prize has three areas of focus: education, assessment and recognition.

We teach leaders to better understand their role in building a culture of operational excellence and we teach managers how to better align systems to drive ideal, principle-based behaviors.

Our focus on assessment is not as much on awarding The Shingo Prize, but more on using the Shingo model as the basis for honest, self- and organizational-evaluation and initiating lasting improvements to the culture. In fact, we often say that The "True" Shingo Prize is the culture of operational excellence that comes from a disciplined application of the Shingo model into your organization.

Recognition is given each year to successful challengers from around the world at the Annual Shingo Prize

International Conference & Awards Ceremony and Gala. Recipients may come from any industry and any part of the world. While many warned us that the standard was too high and, consequently, no organization would apply, we have found the opposite to be the case.

Every year we have more and more applications for assessment and recognition. While the number of recipients of The Shingo Prize has been reduced dramatically, we now recognize 10-20 companies each year for their progress toward building this highly coveted culture with either a Shingo Bronze or a Shingo Silver Medallion.

I congratulate you and your organization on your commitment to improvement. I am confident that, as you study and implement the Shingo model, your efforts will be

rewarded with a culture that unleashes potential and achieves extraordinary results.

I am sincerely looking forward to our association one with another and anticipate taking this journey to excellence together!

I recommend a thoughtful reading of this primer. Mark it up, make notes and then discuss it with your colleagues. I am certain that you will gain many new insights that will help you to refine your target and accelerate your upward trajectory.

Sincerely,



Robert D. Miller  
Executive Director  
The Shingo Prize for Operational Excellence



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The Shingo Model

# The Shingo Model

The search for improvement is instinctive. For businesses and indeed any organization to be successful in the long term, they must be engaged in a relentless quest to make things better. Failure to make this an organizational priority will inevitably result in organizational decline. Excellence must be the pursuit of all great leaders. In fact, the passionate pursuit of perfection, even knowing it is fundamentally impossible to achieve, brings out the very best in every human being.

## Why So Many Fail

Improvement is hard work! It requires great leaders, smart managers and empowered people. Improvement cannot be delegated down, organized into a program or trained into the people. Improvement requires more than the application of a new tool set or the power of a charismatic personality. Improvement requires the transformation of a culture to one where every single person is engaged every day, in most often small, but from time to time, large change.

In reality, every organization is naturally in some state of transformation. The critical questions are, “To what end is the organization being transformed and who are the architects of the transformation?” The Shingo model of operational excellence

asserts that successful organizational transformation occurs when leaders understand and take personal responsibility for architecting a deep and abiding culture of continuous improvement. This is not something that can be delegated to others. As the CEO of a very successful organization recently said, “Leaders lead culture!”

## A Culture Built on Correct Principles

Stephen R. Covey described principles as fundamental truths. He defined a principle as a natural law that is universally understood, timeless in its meaning and fundamentally inarguable because it is self-evident. Dr. Covey taught that values govern our actions but principles govern the consequence of our actions.

Values are cultural, personal, interpretable and variable. Our personal values influence how we see the world and ultimately our choices for how to behave. Principles govern the outcomes of our choices. In other words, the values of an unprincipled person will very likely lead to behaviors that are far from ideal.

Principles govern everything that happens in the natural world. Scientists the world-over continually search to understand

more of the principles that govern the universe. They do not invent them; they only discover their existence and seek to do good by taking purposeful action based on knowledge of the guiding principle. Principles govern the laws of science; they determine the consequences of human relationships; and ultimately, principles influence the successful outcome of every business endeavor.

### **Principles Predict Performance**

One of the most powerful aspects of principles is their ability to predict outcomes. Principles govern the outcome or consequence of the behavioral choices we each make. The closer our actual behavior aligns with the ideal behavior that is linked to the principle, the greater the likelihood the outcomes of our behavior can be predicted. This is profound given that very few things in any business can be predicted with a high degree of certainty. A culture where every employee understands and is committed to principle-based behavior will be a culture with a very high likelihood of achieving predictably excellent results. Similarly, a corporation not well grounded in principles will result in a wide variety of personal interpretations of how to apply their values in work situations.

### **Why Operational Excellence?**

For decades we have watched, and all too often experienced, the disappointing efforts of programmatic improvement initiatives, leaving in their wake a trail of

unintended negative consequences rarely resulting in lasting improvement. Quality Circles, Just-in-Time, Total Quality Management, Business Process Re-engineering, Six Sigma and, most recently, Lean are a few illustrations of well-intentioned initiatives that have far under-delivered on their promised benefits. Our study of these programs over the last 25 years has led us to believe that the problem has nothing to do with the concepts and everything to do with the programmatic, tool-oriented deployment of them.

The Shingo model is based on a systematic study of each of these improvement initiatives. Our approach bi-passes the tools that each program has engendered and focuses rather on the underlying/guiding principles and supporting key concepts behind them. We recognize the necessity of good improvement tools but focus on them only within the context of enabling a system to better drive ideal, principle-based behaviors. The Shingo “house” provides a summary and categorization of this collection of guiding principles and supporting concepts.

When taken in their totality, these timeless principles become the basis for building a lasting culture of excellence in the execution of one’s mission statement. We call this relationship between business results and principle-based behavior, “operational excellence.”

Operational excellence cannot be a program, another new set of tools or a new management fad. Operational excellence is the consequence of an enterprise-wide practice of ideal behaviors based on correct principles. As long as improvement is seen as something outside the core work of the business, as long as it is viewed as “something else to do,” operational excellence will remain elusive.

When leaders anchor the corporate mission, vision and values to principles of operational excellence and help associates to connect and anchor their own values to the same principles, they enable a shift in the way people think and behave. Changing the collective behavior of the group changes the culture. This is a leadership responsibility that cannot be delegated.

### **Principles of Operational Excellence (The Shingo House)**

In his book “Key Strategies for Plant Improvement,” Dr. Shingo said, “Think in terms of categorical principles.” The Shingo house is a categorization of the guiding principles of operational excellence. Associated with each category are also listed many important supporting concepts.

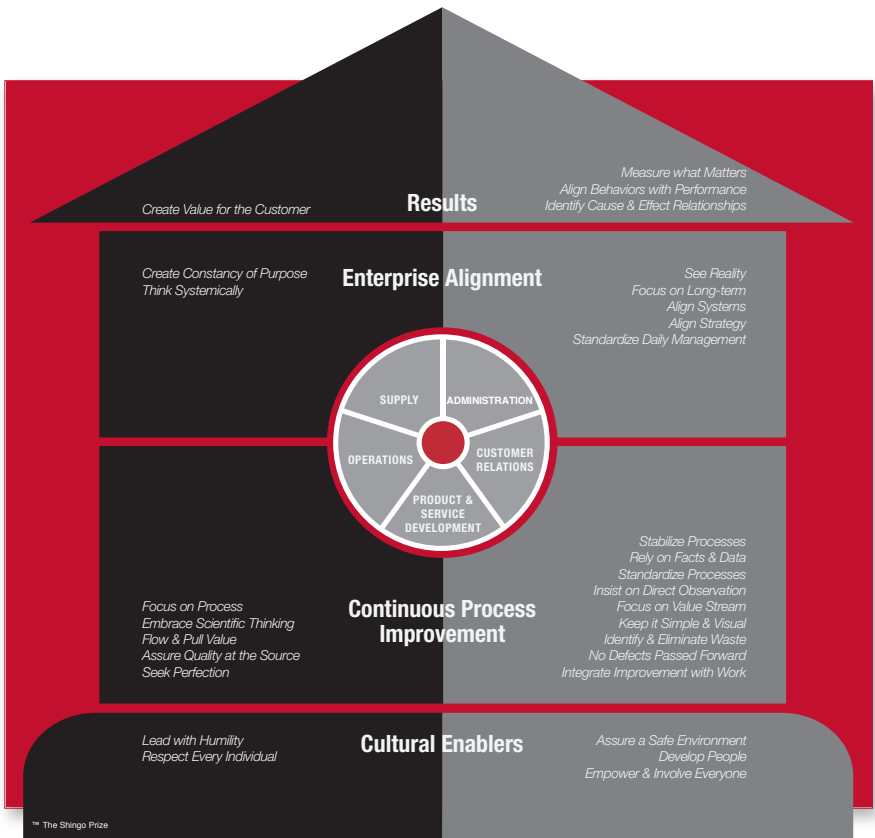
The principles are categorized into four dimensions: cultural enablers, continu-

ous process improvement, enterprise alignment and results – the ultimate end of all business initiatives. These four dimensions overlay five core business systems: product/service development, customer relations, operations, supply and a variety of management or administrative support systems.

### **Guiding Principles**

The Shingo Prize for Operational Excellence did not create the 10 guiding principles of operational excellence, but rather they have always existed. In truth, there is ample evidence that these principles have been well understood, more or less, at different times for thousands of years. As the world has gone through cycles of advancement and decline, it seems these principles are routinely lost and forgotten and must be re-discovered. Emerging from the dark ages into a period of enlightenment and industrialization, the impact of these principles are only now beginning to be understood again.

Certainly, and even surprisingly, most business schools do not emphasize these principles even though they are the driver for business execution excellence. The cause for this may be that these fundamental business principles have been lost in management fads and tool boxes that become programs or “flavors of the month.”



For organizations to be successful over the long term, leaders must deeply and personally understand the principles that govern their success. Furthermore, they must ensure the behaviors of every person who contributes to the business are in harmony with these principles. In short, the organizational culture they build must be grounded in correct principles.

The Shingo Prize for Operational Excellence has made a diligent search of thought leaders over the last 100 years. Their work has been carefully analyzed and dissected, and the unique concepts or principles from each have been extracted. Compiling, distilling and prioritizing the list led to the 10 guiding principles on the left side of the house and the supporting concepts for each dimension on the right side. Supporting concepts are critical to pay attention to but may not stand up to the rigor of being universal, timeless and self-evident like the guiding principles.

The dimensions are the result of “thinking categorically about the principles.” It is clear that all four dimensions of the model require focus in order to achieve excellence. In the same way that we need to comprehend objects in three dimensions to truly appreciate all of their characteristics, operational excellence must be viewed in these four dimensions in order to fully appreciate the power of the principles to affect business outcomes.

### **Transforming a Culture (Shingo Transformation Process)**

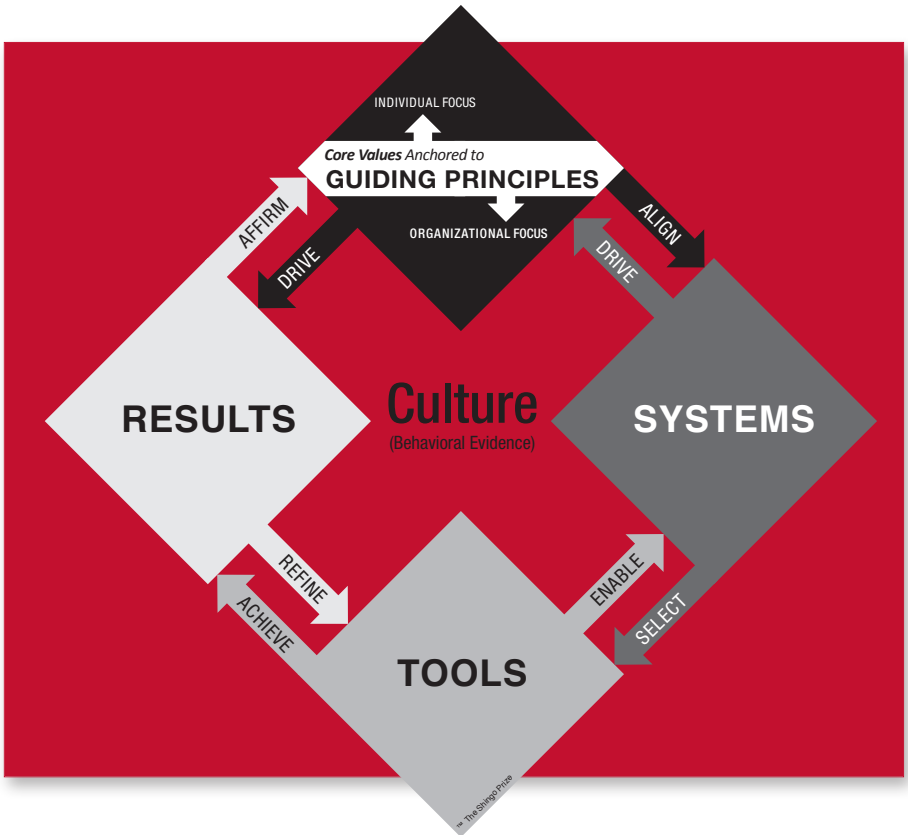
Many organizations and their leaders are coming to understand that sustain-

ability requires focusing on the culture; that’s the easy part. The difficult part is in knowing how to really affect change. The Shingo transformation process is a methodology for accelerating a personal and enterprise-wide transformation to a culture of operational excellence. The process is based on the teaching of Dr.

“Organizations can never sufficiently release the full potential of their people by creating a tool-oriented culture.”

Shingo who recognized that business improvement comes through understanding the relationship between principles, systems and tools.

Dr. Shingo understood that operational excellence is not achieved by superficial imitation or the isolated and random use of tools and techniques (“know how”). Instead, achieving operational excellence requires people to “know why” (i.e., an understanding of underlying principles.) In the 1940s, the work of French social scientist, Jean Piaget, led us to understand that learning occurs when people come to deeply understand the meaning behind the methodology. People naturally search first for meaning, the principle and then attempt to organize them somehow into a system or some kind of order. Finally, they create tools to



better enable the systems to accomplish the purpose for which they were created.

**Learning and Teaching the Principles**

The first step a leader must take in leading cultural transformation is a personal journey to understand what each of these guiding principles mean concep-

tually and then what they mean personally. It is impossible for a leader to lead the development of a principle-based culture until he or she has gone through the deep personal reflection required to begin a cultural transformation. This is no trivial task. For many and perhaps most, fully embracing these principles



requires a fundamental re-thinking of the rules of engagement used to get to where they are.

At a minimum, leaders must be curious enough to experiment with the principle. John Shook at the Lean Enterprise Institute taught us that it is often impossible to “think our way into a new way of acting.” Rather, guided by correct principles, one may do, observe, learn

If we encourage, enable or simply allow a culture to emerge where employees are thought of merely as an unfortunate cost burden or that the smartest people are those that rise to the top, the consequence will be a workforce that is not fully engaged. Ideas for improvement are never articulated and acted on, people feel unfulfilled in their work and turnover is very high. Labor costs become excessively high, busi-

## The passionate pursuit of perfection, even knowing it is fundamentally impossible to achieve, brings out the very best in every human being.

and then do something else until we “act our way into a new way of thinking.” By carefully analyzing the cause-and-effect relationship between principles and results, a leader will begin to shift their own beliefs about what drives optimal business performance. After gaining this new insight, it becomes the effective leader’s primary responsibility to see that others in his/her organization have experiences where they can gain the same insight. Leaders who choose to disregard the principles that govern business outcomes do so at great peril. Whether we acknowledge them or not, the principles of operational excellence always govern the consequence of our leadership and management behaviors. An example may help.

ness systems stagnate and innovation is not fast enough to compete in a rapidly changing business climate. Unwise leaders see this as a validation of what they believed rather than the disappointing end of a self-fulfilling prophesy. When people understand principles for themselves, the “why,” they become empowered to take personal initiative. Leaders who teach associates the principles behind the tactics or the tools can be confident that innovation from each individual will be pointed in the right direction. It is not necessary for a leader to define every ideal behavior for others. If the principle is truly a principle, people

Dr. Shingo understood this and taught that the primary role of a leader is to drive the principles of operational excellence into the culture.

with different values will readily be able to define ideal behavior for themselves and, over time, behaviors become consistent even in a diverse environment.

When leaders precisely define the detailed and expected behaviors for everyone else, resentment builds. It conveys mistrust and makes people feel incompetent.

### **Aligning the Systems with Principles**

All work in organizations is the outcome of a system. Systems must be designed to produce a specific end goal, otherwise they evolve on their own. Systems drive the behavior of people or rather they create the conditions that cause people to behave in a certain way. One of the outcomes of poorly designed systems is enormous variation in behavior or even consistently bad behavior. Variation in behavior leads to variation in results. Operational excellence requires ideal behavior that translates into consistent and ideal results.

*Dr. Shingo also taught that the primary role of managers must shift from firefighting to designing, aligning and improving systems.*

The Shingo transformation process illustrates the critical need to align every business, management and work system of the organization with the principles of operational excellence. When systems are properly aligned with principles, they

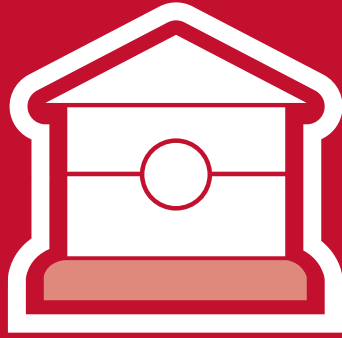
strategically influence people's behavior toward the ideal.

### **The Enabling Role of Improvement Tools**

A tool is nothing more than a point solution or a specific means to a specific end. Dr. Shingo referred to tools as techniques for problem-solving, necessary but not sufficient. He taught that tools should be selected to enable a system to perform its intended purpose. In many ways, a system may be thought of as a collection of tools working together to accomplish an intended outcome. A successful enterprise is usually made up of complex business systems that can be further divided into layers of sub-systems, each having embedded in them the necessary tools to enable the successful outcome of the system.

*Powerful organizations are made up of powerful people who understand the principles that govern their successful contribution.*

Perhaps the largest mistake made by corporations over the last three or four decades has been the inappropriate focus on a specific tool-set as the basis for their improvement efforts. Tools do not answer the question of "why" only the question of "how." Knowing the "how" without understanding fully the "why" leaves people waiting for instructions and powerless to act on their own.



Dimension One

# D1: Cultural Enablers

Cultural enablers make it possible for people within the organization to engage in the transformation journey, progress in their understanding and, ultimately, build a culture of operational excellence.

Operational excellence cannot be achieved through top-down directives or piecemeal implementation of tools. It requires a widespread commitment throughout the organization to execute according to the principles of operational excellence. A culture must be developed where every person in the organization demonstrates a high level of respect for every other person. Developing a culture of mutual respect and humility takes a consistent commitment over a sustained period of time.

## **Principle – Lead with Humility**

One common trait among leading practitioners of operational excellence is a sense of humility. Humility is an enabling principle that precedes learning and improvement. A leader's willingness to seek input, listen carefully and continuously learn creates an environment where associates feel respected and energized and give freely of their creative abilities.

There is also a need for humility on the part of all members of an organization. Ideas can come from anywhere. One can learn something new from anyone. Improvement is only possible when people are willing to abandon ownership, bias and prejudice in their pursuit of a better way.

### **Supporting Concept**

Assure a Safe Environment

There is no greater measure of respect for the individual than creating a work environment that promotes both the health and safety of employees and the protection of the environment and the community. Environmental and safety systems embody a philosophical and cultural commitment that begins with leadership. When leadership is committed, then the organization creates and supports appropriate systems and behaviors.

***In short, safety is first!***

### **Supporting Concept**

#### Develop People

People development has emerged as an important and powerful cultural enabler and goes hand-in-hand with principles of operational excellence. Through people development, the organization creates the “new scientists” that will drive future improvement. People development is far greater than just classroom training. It includes hands-on experiences where people can experience new ideas in a way that creates personal insight and a shift in mindsets and behavior.

An organization’s leaders must be committed to developing people and expanding the knowledge base. Leaders come to realize that expenses for education and training are necessary investments for long-term health; as such, the commitment to this investment does not waver.

### **Supporting Concept**

#### Empower and Involve Everyone

For an organization to be competitive, the full potential of every single individual must be realized. People are the only organizational asset that has an infinite capacity to appreciate in value. The challenges of competing in global markets are so great that success can

only be achieved when every person at every level of the organization is able to continuously innovate and improve. Elimination of barriers to that innovation becomes the responsibility of management.

Fundamental to the Shingo model is the concept of teaching people the key principles (the “why”) behind everything they do. When people understand why, they become empowered to take personal initiative. Managing a team of people who share a deep understanding and commitment to the key concepts and principles is much easier than managing the work of those who are only doing what they are told. Empowered employees who understand relevant principles are far more likely to make good decisions about the direction and appropriateness of their ideas for improvement.

Similarly, when employees have a clear sense of direction and strategy and have a real-time measure of contribution, they become a powerful force for propelling the organization forward.

### **Principle – Respect Every Individual**

Respect is a principle that enables the development of people and creates an environment for empowered associates to improve the processes that they “own.” This principle is stated in the

## Lead with Humility

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Because I lead with humility (the principle); therefore, I am open to good ideas and innovation from anywhere in the organization (the value). Because I lead with humility (the principle); therefore, I accept responsibility and enable change (the value). Because I possess humility (the principle); therefore, I seek, trust and follow the direction of those with a responsibility to lead (the value).

## Respect Every Individual

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Because we respect every individual (the principle); therefore, we always place safety first (the value). Because we have respect for every individual (the principle); therefore, we empower people to act independently (the value). Because we have respect for every individual (the principle); therefore, we make all of our key communications open.

context of “every individual” rather than “for people” as a group. Respect must become something that is deeply felt for and by every person in the organization.

Respect for every individual naturally includes respect for customers, for suppliers, for the community and for society in general. Individuals are energized when this type of respect is demonstrated. Most associates will say that to be respected is the most important thing they want from their employment. When people feel respected, they give far more than their hands; they give their minds and hearts.

Respect for every individual becomes a powerful “why” for many of the values espoused by great organizations. For example, simply stating important values

such as safety first, empowerment or open communication often fails to create uniform ideal behaviors throughout the enterprise. This is because these values are “whats” that fail to answer for people the question of “why.” The principle “Respect Every Individual” answers the question of “why.”

*The table on the following page will provide examples of ideal behavior for leaders, managers and associates. The list is intended to provide examples of ideal behavior that flow from two guiding principles and should not in any way be considered as an exhaustive list.*

## Examples of Ideal Principle-based Behavior

<b>Leaders</b>	All leaders routinely spend time at the actual work locations where the actual work is performed.
	Leaders continuously seek the input of others, listen to their input and adapt their actions based on what they learn.
	Leaders in all areas demonstrate a willingness to learn and publicly acknowledge important insights they have gained.
	Leaders take responsibility for applying principles of operational excellence in their own lives and ensure these principles become the foundation of organizational culture.
	Leaders engage people at all levels in defining ideal, principle-based behaviors and support managers in the alignment of all business and management systems.
	Leaders develop systems to ensure they remain publicly accountable for their own principle-based behavior seeking feedback from all levels and across the entire enterprise.
	Leaders ensure products and services do not have an unintended negative impact on the sustainability of communities and the planet.
<b>Managers</b>	All managers constantly work with others to better align systems with ideal behaviors as defined by the guiding principles.
	Managers act as coaches and mentors to others in the execution of principle-based systems and are constantly receiving personal and organizational feedback for improvement.
	All managers are visible in the work space and demonstrate an openness to listen and learn from others.
	Managers across the enterprise ensure associates have the information they need to be successful in their work and push decisions out and down to the appropriate levels.
	Managers create a safe and productive work environment, keeping the safety of all associates as the highest of all priorities.
	Managers regularly review the skills and competencies required of all associates and work with each one to provide appropriate opportunities for associates to gain new insight.
	Managers ensure appropriate systems are in place to protect the environment and support for the communities where they are located.
<b>Associates</b>	All associates, every day, demonstrate a commitment to the policies, principles and standards developed for the areas in which they work.
	Associates seek out and learn from others in the organization including leaders, managers and peers.
	All associates take full responsibility for their own personal development in relation to their contribution to the enterprise.
	Associates demonstrate an eagerness to learn new skills, take initiative and share their learning and success with others.



Dimension Two



# D2: Continuous Process Improvement

Continuous improvement begins by clearly defining value through the eyes of customers. Expectations must be clearly communicated so systems can be designed to meet customer needs. Every employee must know “what good is,” whether his or her process is creating good product or service, and they must know what to do if it is not.

As associates learn to identify and eliminate waste, they will, by necessity, follow Dr. Shingo’s advice: “Improvement means the elimination of waste, and the most essential precondition for improvement is the proper pursuit of goals. We must not be mistaken, first of all, about what improvement means. The four goals of improvement must be to make things easier, better, faster and cheaper.” Particular emphasis is placed on a quicker, more flexible response throughout the system.

The focus for continuous improvement cannot be only quality or cost but instead must incorporate all aspects of value as perceived by the customer, including innovation, quality, cost, flexibil-

ity, quick delivery and a comprehensive view of environmental health and safety.

Continuous improvement focused on flow of value requires both scientific thinking and the capacity to identify and eliminate waste (things that interrupt the continuous flow of value).

## **Principle – Focus on Process**

A process focus recognizes that all outputs, whether product or service, are created by processes acting upon inputs. This simple truth is often overlooked: Good processes will produce the intended output, as long as proper inputs are provided.

Process focus also helps focus problem-solving efforts on process rather than people. A complete shift to process focus eliminates the tendency to find the culprit (person) who made the mistake but rather leads to a pursuit of the real culprit (process) that allowed the mistake to be made. Thus, process focus also supports the cultural enablers, creating an environment where learning

# “Simplicity is the ultimate sophistication.” — *Leonardo Da Vinci*

from mistakes can become a powerful element of continuous improvement.

## **Principle – Embrace Scientific Thinking**

A focus on process lends itself to scientific thinking, a natural method for learning and the most effective approach to improvement. All associates can be trained to use scientific thinking to improve the processes with which they work, creating a culture that provides common understanding, approach and language regarding improvement. Scientific thinking is also results-based, placing a premium on defining and communicating desired outcomes throughout the organization.

There are a variety of models for scientific thinking, such as PDCA (plan, do, check and adjust), the QI Story, A3 thinking and DMAIC (define, measure, analyze, improve and control).

## **Principle – Flow and Pull Value**

Flow thinking is the focus on shortening lead-time from the beginning of the value stream to the end of the value stream and on removing all barriers (waste) that impede the creation of value and its delivery to the customer. Flow is the best driver to make processes faster, easier, cheaper and better. Other potential drivers such as unit cost or process variability are too narrowly focused, distorting priorities and delivering suboptimal results. A cost focus is particularly dangerous when it creates perverse incentives and budget manipulations incidental to actual improvement.

Pull is the concept of matching the rate of production to the level of demand, the goal in any environment. Yet pull is not feasible or cost-effective without the flexibility and short lead times that result from flow.

Flow and pull create enormous positive benefits in all aspects in any

business. Focusing on flow will lead to improvements, including better safety and morale, more consistent quality with fewer defects, increases in on-time delivery and flexibility and lower costs, without running into the traditional trade-offs. In addition, daily and weekly results become more consistent and predictable.

**Principle –  
Assure Quality at the Source**

Assuring quality at the source is the combination of three important concepts: (1) do not pass defects forward, (2) stop and fix problems and (3) respect the individual in the process. Defects are a source of instability and

**Principle – Seek Perfection**

It is important to understand that the continuous process improvement journey has no end. This explains Dr. Shingo's philosophy that one should always look for problems where there doesn't appear to be any. This is contrary to the traditional belief: "If it isn't broken, don't fix it." The pursuit of perfection reveals that there are always opportunities for improvement. There is always waste, and the more a process is observed the more waste will be seen. While focus on process guides and directs the improvement efforts, seeking for perfection is the engine that keeps improve-

The pursuit of perfection reveals that there are always opportunities for improvement.

waste so assuring quality at the source requires the establishment of processes for recognizing errors in the process itself. Organizations must commit to stopping and fixing processes that are creating defects, rather than keeping products or services moving while planning to fix the issue later. Proper use of the human element in the process for thinking, analysis, problem solving and the implementation of countermeasures is vital to continuous improvement.

ment energized and moving forward at an aggressive pace. The term problem-solving may imply that after a solution is implemented, improvement is done. Seeking perfection and scientific thinking combine to find countermeasures, not game-ending solutions, and then revisits the issue again and again, pursuing perfection without really expecting to find it.

### **Supporting Concept**

#### Stabilize Processes

Stability in processes is the bedrock foundation of any improvement system, creating consistency and repeatability. Stability is a prerequisite for improvement providing a basis for problem identification and continuous improvement. Almost all of the continuous improvement principles rely on stability.

Stability is the precursor to achieving flow. Many of the rationalizations for waste are based on the instability of processes, as if they are beyond our control. Instead, we should apply the basic tools available to reduce or eliminate instability and create processes that enable the identification and elimination of waste.

### **Supporting Concept**

#### Standardize Processes

While stability is a necessary precondition for creating flow and improvement, standardization builds control into the process itself. Standardization is the supporting principle behind maintaining improvement, rather than springing back to preceding practices and results. Standardization also eliminates the need to control operations through cost standards, production targets or other traditional supervisory methods. When stan-

dardization is in place, the work itself serves as the management control mechanism. Supervisors are freed up for other tasks, when they are not “required” to monitor and control the work process.

### **Supporting Concept**

#### Insist on Direct Observation

Direct observation is a supporting principle tied to scientific thinking. It is in fact the first step of the scientific method. Direct observation is necessary to truly understand the process or phenomenon being studied. All too frequently, perceptions, past experience, instincts and inaccurate standards are misconstrued as reality. Through direct observation, reality can be seen, confirmed and established as the consensus.

### **Supporting Concept**

#### Focus on Value Stream

Flow and pull value combined with focus on process lead to the necessity of defining value streams and focusing organizational attention on them. A value stream is the collection of all of the necessary steps required to deliver value to the customer. Defining what customers value is an essential step to focus on the value stream. Clearly understanding the entire value stream, however, is the only way for an organization to improve

the value delivered and/or improve the process by which it is delivered.

### **Supporting Concept**

Keep it Simple & Visual

In society today there is frequently a bias toward complex solutions and a premium paid to those who seem to manage complexity well. However, it is usually the case that better results at a lower cost can be achieved by simplification. Dr. Shingo's life work in mistake proofing is centered on this principle.

Many of the seven forms of waste are in fact the result of information deficits. Making information visual is the supporting principle that when combined with simplification solves the information deficits.

### **Supporting Concept**

Identify and Eliminate Waste

Identification and elimination of waste is a practical concept for making processes flow, thus it becomes a primary focus of continuous improvement. Waste elimination is a powerful supporting principle because it is easily understood by everyone associated with a value stream, compared to the complex concepts and computations often associated with cost per unit, cost variances, statistical variability and other complex metrics. Focus-

ing on the elimination of waste will consistently drive appropriate behavior, while the wrong focus can frequently become a barrier to improvement, large inventory write-downs, fire sales or scrap.

One way to view waste is that it is anything that slows or interrupts the continuous flow of value to customers. In the end, identifying and eliminating waste is a concept that effectively engages the entire organization in the continuous improvement effort.

### **Supporting Concept**

No Defect Passed Forward

This concept is essential for operational excellence from many different points of view. From a leader's perspective, it requires great courage to stop the process long enough to understand the root cause and take counter-measures that prevent the process from reoccurring. For the leader, this often means trading any short-term loss for substantial long-term gain. From a manager's perspective, systems must be in place to ensure that any result that varies from the standard, even slightly, creates an expectation of and support for immediate action. We often call this "swarming." From an associate's point of view, "no defect passed forward" requires a mindset of ownership and accountability. If

standards are clearly defined, every person should know what good is. Leaders and managers should role model then create the conditions for associates to develop the mindset of personal integrity; meaning, that no one would

that will enhance the value (or eliminate the waste) and thus pursue perfection. Each person in an organization performs daily work. When improvement is integrated with work, each person accepts responsibility for improvement

“Everything should be made as simple as possible but not simpler.” — *Albert Einstein*

ever knowingly or willingly forward the outcome of their value contribution to someone else if it contained the slightest variation from the standard.

This supporting concept feeds the mindset and tools of continuous improvement and creates the conditions for seeking perfection. It is possible to achieve perfection in the application of this concept.

### **Supporting Concept**

Integrate Improvement with Work

As the migration toward a principle-based culture occurs, the activities and approaches for continuous improvement become a part of the everyday work of every employee in an organization. Associates become “scientists” who continually assess the current state of their processes and pursue a better future state

of the daily work processes. Executives are responsible for improving strategy setting processes or perhaps resource alignment processes. They are primarily responsible to deploy mission-critical strategy and metrics down into the organization such that every person not only has a clear line of sight to what matters the most but are also motivated by the mission in a way that creates a compelling case for improvement.

Managers are responsible for improving quality systems, or performance development systems or value stream flow. Line workers are responsible for improving their cycle times, or quality of work or yields. Integrating improvement with work is more than assigning responsibility. It entails the creation of standardized work that defines systems for improvement.

### Supporting Concept

#### Rely on Data & Facts

Shingo emphasized the importance of being data-driven in the pursuit of continuous improvement. He frequently shared examples of specific situations where data was collected, but it was not the correct data or the data wasn't actually being used in the improvement process. Finally, he was adamant that the understanding of the actual process be so detailed that when

implementing a change in the process, the improvement, as evidenced by the data, could be predicted. Thus, reconciliation is required between the predicted results and the actual results, making the improvement process truly data-driven. The principle is that when data is treated loosely or imprecisely, there is a tendency to leave potential improvement on the table or, even worse, to not achieve any improvement at all.

*The following table provides examples of ideal behavior for leaders, managers and associates. The list is intended to provide examples of ideal behavior that flow from this single guiding principle and should not in any way be considered as an exhaustive list.*

## Examples of Ideal Principle-based Behavior

### Leaders

Every leader devotes a significant amount of his/her time (up to 80 percent) ensuring the principles of continuous improvement are deeply embedded into every facet of the organizational culture.

Every leader consistently evaluates their own behavior related to each of the principles.

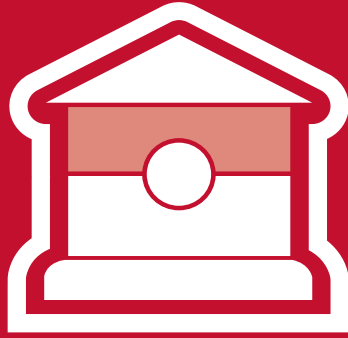
Leaders ensure continuous improvement is a part of their daily standard work and are accountable to others for their improvement.

Leaders in all areas create a healthy tension between celebrating accomplishments and setting goals to move to the next level.

All leaders in every area of the organization encourage the establishment of stretch goals and encourage managers and associates to push themselves to levels of performance that do not seem possible.

	Leaders consistently ask for and expect to see the application of appropriate tools to understand root cause prior to implementing countermeasures.
	Leaders expect and support the role of managers in designing and constantly improving systems at the business, management, improvement and work levels as the first course of action when results are less than expected.
	Every leader understands and balances the organizational focus on both behaviors and results, holding themselves and others accountable for both.
<b>Managers</b>	Managers in all areas devote a significant amount of their time (up to 80 percent) ensuring the management systems of the organization are perfectly aligned to drive ideal principle-based behavior.
	All managers participate with associates as required on improvement initiatives.
	Managers demonstrate knowledge of appropriate tools and use them regularly to solve problems related to their areas of responsibility.
	All managers watch for and appropriately recognize associates for both demonstrating ideal behavior and for achieving business goals.
<b>Associates</b>	Every associate in every part of the organization is engaged every day in using the appropriate tools of continuous improvement to eliminate waste and maximize value creation.
	Associates everywhere seek to understand the principles (the why) behind the tools (the how); they learn and use that knowledge to continuously improve the application of the tools.
	All associates demonstrate the courage and integrity to tell the truth, stop production and be accountable for defects they observe or create themselves.
	Associates share their expertise in developing best practice standard work and demonstrate the discipline to follow it until a better way has been developed.





Dimension Three

# D3: Enterprise Alignment

One of the most significant failures of modern management is its focus on strategy and planning without considering execution. To succeed, organizations must develop management systems that align work and behaviors with principles and direction in ways that are simple, comprehensible, actionable and standardized. We call this “Principle-based Strategy Deployment.” Individual leaders cannot develop individual approaches to management without introducing massive waste into an organization.

Strategy deployment requires a management system built around scientific thinking, with more emphasis on cycles of learning than on perfect plans. It is essential to establish effective communication, a process for gaining consensus, clear accountability and systems where execution and countermeasures are planned and tracked, whether through PDCA or a similar methodology. In essence, operational excellence is the definition of successful strategy deployment

when business strategies are aligned with correct principles.

The sum of individual efforts rarely even approximates the effective alignment of the pieces into a single integrated whole. Creating value for customers is ultimately accomplished through the effective alignment of every value stream in an organization.

## **Principle – Create Constancy of Purpose**

Almost every aspect of any organization is always in a constant state of change. Customers change, customer’s expectations change, competitors change, markets change, technology changes, leadership and management changes, processes change, products change, strategies change, even values or the implied meaning of those values change. Even knowing this, the first of W. Edwards Deming’s “14 Points” is to create constancy of purpose. How is this possible?

Purpose, at the highest level answers the question: “Why does this organization

exist?” It is incumbent upon leaders to find agreement on philosophical and strategic direction that provides a unifying vision. This sense of direction helps people keep their eyes on the horizon so that when tactical decisions require a temporary detour, they understand why and can contribute to getting back on track.

The second category for where constancy of purpose can be achieved is in the establishment of the guiding principles upon which the organization is grounded. Principles are universal, timeless and self-evident laws that govern the consequences of our actions. The degree to which principles are adhered will always impact the long-term success of any organization. Leaders must come to understand which principles have the greatest impact on their results and then make certain every aspect of the organization is aligned to drive behavior that is in greatest harmony with the principles.

Having established direction and guiding principles, a leader must align strategy and performance metrics broadly and deeply into the organization. A system must be built to ensure constant communication, both up and down.

Changes in direction, guiding principles and key metrics should be treated like

changes in the national constitution. Organizations that frequently redirect philosophies and strategies fail to recognize the tremendous waste associated with instability, fluctuation and, perhaps most importantly, the loss of human commitment.

### **Principle – Think Systemically**

Systemic thinking is the principle that unifies all the other principles of operational excellence and enables organizations to sustain their culture of continuous improvement and develop a constancy of purpose.

Systemic thinking requires organizations to both analyze and synthesize. Analysis, or convergent thinking, is focused on taking things apart to see what can be learned from the various components. We call this “looking into things.” Convergent thinking is what leads us to focus on the “how.” Synthesis, or divergent thinking, is focused on seeing how things might work together. We call this “looking out of things.” Divergent thinking is what leads us to focus on the “why.” Operational excellence requires both.

Leaders realize that the impact of synergy — how things work together — is far greater than the sum of the parts. As managers design and align systems with correct principles, they must shift

from thinking purely analytically to thinking systemically.

As managers move into systemic thinking, the full value of operational excellence is realized across the organization, the enterprise and ultimately the entire value chain. As associates adopt systemic thinking practices, they gain the necessary perspective to safely initiate improvement projects on their own. Ultimately, this understanding is what allows improvement effort to transition from being solely top-down to more of a grassroots effort.

### **Supporting Concept**

See Reality

This is a very important concept. Most managers and leaders consider themselves quite capable of seeing the world around them and assessing the current situational realities. However, Dr. Shingo teaches that people can have blind spots created by long-held paradigms, experience, history, expectations, etc. Thus the practice of “go and see” was developed based on the principle that reality needs to be perceived and understood based upon the five senses.

Most organizations create barriers that make it very difficult for people to see and tell the truth about what they see.

A recently retired US senator wrote that having travelled on numerous trips with other political and military leaders to areas of serious world conflict, his greatest disappointment was that virtually all of their assessments of progress were greatly distorted from the actual data they observed.

Further, most organizations unintentionally build cultures that prevent the free flow of information that communicates an honest picture of reality. Max De Pree said, “The first responsibility of a leader is to define reality.” A leader must establish systems that make organizational performance and associate behavior transparent to all.

No leader can effectively lead without having a firm grasp of the current business realities.

### **Supporting Concept**

Focus on Long Term

Jeffrey Liker highlights the principle of long-term focus, which provides a foundation of stability in the executive suite that can be achieved in no other way. When an organization creates a long-term focus, it is more likely that decisions will in fact pursue safety, quality, delivery and cost rather than just monthly or quarterly financial targets or

bonus cut-offs. In conjunction with taking care of the short- and medium-term priorities, thinking in terms of 20- to 50-year legacy goals significantly reduces the tendencies for knee-jerk reactions to urgent pressures.

### **Supporting Concept**

#### Align Systems

From the stakeholders' perspective, the full potential is realized only when most critical aspects of an enterprise share a common platform of principles of operational excellence, management systems and tools. While it is expected that organizations develop some unique elements of their local culture, it is also expected that principles become a common, unifying part of each locale. Top-level leadership, staff and business processes should exemplify the same principles, systems and tools as do the operational components of the enterprise.

### **Supporting Concept**

#### Align Strategy

Policy deployment is a planning and implementation system, based on scientific thinking, employee involvement and respect for the individual. At the strategy level, policy deployment provides leadership with the necessary principles, systems and tools to carefully align key objectives and execution strategies while

empowering the organization through cascading levels of detail to achieve those objectives. Because so many people are involved, clarity is critical. An aligned strategy helps keep everyone, literally, on the same (single) page and pointed in the same direction.

### **Supporting Concept**

#### Standardized Daily Management

The concept of having some level of detailed work description for how to actually do daily work applies at all levels of the organization. Regardless of the perception among many leaders, their work can and should be organized into standard components.

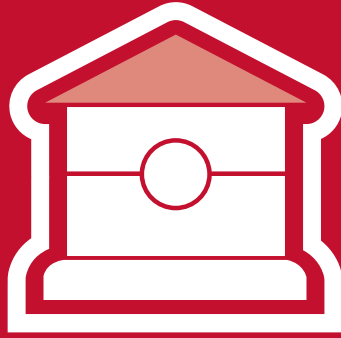
Standard daily management creates a reference point from which continuous improvement can be based. Standard daily management can lead to greater process control, reduction in variability, improved quality and flexibility, stability (i.e. predictable outcomes), visibility of abnormalities, clear expectations and a platform for individual and organizational learning. Standard daily management enables creativity that is focused and controlled rather than ad hoc.

Leaders who follow standard work send a clear message that they are serious and no one is above continuous improvement.

The following table provides examples of ideal behavior for leaders, managers and associates. The list is intended to provide examples of ideal behavior that flow from these two guiding principles and should not in any way be considered as an exhaustive list.

## Examples of Ideal Principle-based Behavior

<b>Leaders</b>	All leaders share a common, clear and compelling vision of the future and talk about it in a consistent way everywhere they go.
	Leaders create and consistently execute a system of “catch ball” to present ideas on strategy down and across the organization, receive feedback and build organizational consensus.
	Leaders establish a simple system of metrics and accountability that aligns and prioritizes the work, decision making and improvement efforts of the organization.
	Leaders focus both on results and behavior, setting targets and accountability for both.
<b>Managers</b>	Managers ensure a continuous flow of information (both horizontally and vertically) to associates, making sure they fully understand the context for their work and the goals they set.
	Managers develop systems to ensure all associates understand strategy, tactics and metrics and know how their work contributes.
	All managers ensure people have enough information and a broad enough perspective to know the implications of their recommendations and actions.
<b>Associates</b>	Associates ask questions that expand thinking to the broader context beyond their own jobs.
	Associates seek job experiences that broaden their perspective.
	All associates know the performance and behavioral metrics for their area, use them to create personal and team improvement and connect their work with company goals.



Dimension Four

# D4: Results

All leaders of organizations share one common responsibility: they are responsible for results. Great results are the outcome of following the principles that govern the results. Ideal results require ideal behavior. This is what we call operational excellence.

## **Principle – Create Value for the Customer**

Every aspect of an organization should be focused on creating value for the customer. It is helpful to consider this true-north concept that should guide decision making and continuous improvement. An organization should drive all aspects of value, including quality, cost, delivery, safety and morale.

### **Supporting Concept** Measure what Matters

Historically, measurement has been focused on management – what management needed to know to be able to plan, organize and control. Within a model where widespread involvement is essential for continuous improvement

and consistent performance, it is important to define measures that matter to those who will be using them. Therefore, line associates need different measures than leaders responsible for the overall enterprise. Many thought leaders on measurement have suggested the new measurements need to: 1) be directly tied to strategic priorities – move the dial, 2) be simple and easy to capture, 3) give timely feedback that is tied to the cycle of work and 4) drive improvement.

Measures that matter can be created throughout the organization to assure that everyone is focused on the appropriate strategic activities and driving continuous improvement that moves the whole enterprise ahead.

### **Supporting Concept** Align Behaviors with Performance

Ideal behavior drives long-term results. This happens when the systems are aligned with principles of operational excellence. Managers should help each person anchor their own personal values with these same principles. Personal



values are what ultimately drive individual behaviors. Leaders are responsible for creating the environment and the process for people to evaluate the correctness of their own values relative to the performance results required of the organization.

One business set a goal to reduce customer complaints only to find that as they did, they began to lose valuable customers. The measure was driving behavior that made complaining such a painful experience that they just stopped calling. A better measure might have been to increase the number of complaints so that every single disappointment is given an opportunity to be resolved.

### **Supporting Concept**

Identify Cause and Effect Relationships

When we want to make a car go faster, we simply press more on the gas pedal.

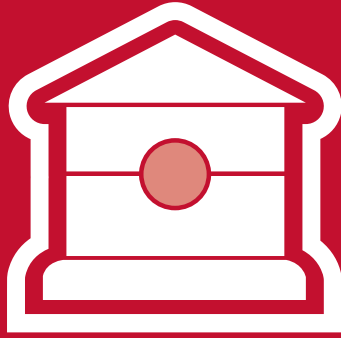
So, the “dial” is the speedometer. What moves the dial? Pressing on the gas pedal. Why does this work? Because there is a physical linkage from the pedal to the engine to the axle. There is a clear cause-and-effect relationship.

Organizations must follow the linkages to determine the cause-and-effect relationships and how goals can be achieved. This is the same concept as root-cause analysis but applied to creating value.

*The following table provides examples of ideal behavior for leaders, managers and associates. The list is intended to provide examples of ideal behavior that flow from this single guiding principle and should not in any way be considered as an exhaustive list.*

## Examples of Ideal Principle-based Behavior

<b>Leaders</b>	Leaders make sure the company scorecard is balanced between results and behavior.
	Leaders ensure the voice of the customer is clearly heard throughout the entire organization.
	Leaders systematically discuss all business results with employees, encouraging questions and discussion.
<b>Managers</b>	All managers implement systems that place value creation and waste elimination at the heart of management and improvement efforts.
	Managers routinely discuss with associates the relationship between actual results and the systems and principles that are creating them.
	Managers make sure that established metrics are aligned upward and side-to-side and are understood and committed to by the people who affect them, so people can see instantly where they are relative to the targets and they know how to move the dial.
<b>Associates</b>	All associates systematically review results and ask questions to understand cause-and-effect.
	Associates use results metrics to prioritize and take personal initiative to make improvements that impact the areas where improvement is needed most.
	Associates demonstrate a strong commitment to provide the greatest value for customers with the least amount of non-value-added resource.
	All associates seek to understand issues from the customers' point of view and strive to maximize the uninterrupted flow of value to them.



Scope of Transformation

# Scope of Transformation

## Business & Management Systems

The principles of operational excellence must be applied across all the business and management systems. The pie in the center of the house represents the scope of transformation within an organization, including all basic customer-facing business systems and all management support systems. The systems associated with each of five typical business areas could include:

Customer Relations
• Sales
• Advertising/promotion
• Order processing and tracking
• Responsive/flexible scheduling
• Invoicing and collections
• Warranty
• Product/service development
• Business processes

Product or Service Development
• Market segmentation and selection
• Research
• Development of products or services, processes and prototypes
• New product or service launch

Operations
• Product or service delivery
• Materials management
• Process engineering
• Maintenance
• Quality assurance and reliability
• Testing

## Supply

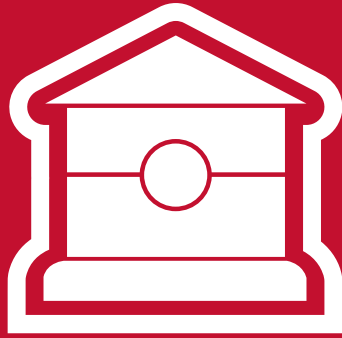
- Supplier selection and qualification
- Supplier development and partnering

## Administration

- Recruiting
- Compensation and benefits
- Training and employee development
- Employee relations and satisfaction
- Capital budgeting
- Budgeting
- Financial reporting
- Management accounting reporting
- Accounts receivable and accounts payable (A/R and A/P)
- Asset management
- Computer systems and support
- Computer application design and/or support
- Networking systems and support

Many, if not all, of these management support processes are fundamentally non-value-added in a pure lean sense; that is, the customer would not pay extra for these. However, some part of each process is “necessary non-value-added work” that is currently vital to the proper functioning of the organization and the eventual effectiveness of the value-added processes, (i.e., a company needs to pay taxes), but the customer doesn’t necessarily get value from the process. Applying the principles to these processes will help to make sure that they are completed as quickly as possible with the fewest possible resources.

Principles of operational excellence should be applied conscientiously in all of these business and management support processes. As understanding deepens and application spreads throughout the entire enterprise, a consistent culture develops which is self-perpetuating and self-directing.



Summary

# Summary

Operational excellence is the vision that many organizations have established to drive improvement. Programs, names, tools, projects and personalities are insufficient to create lasting change. Real change is only possible when timeless principles of operational excellence are understood and deeply embedded into culture. The focus of leaders must change to become more oriented toward driving principles and culture while the manager's focus becomes more on designing and aligning systems to drive ideal principle-based behavior.

The ultimate mission of The Shingo Prize for Operational Excellence is to assist organizations of all kinds in building operational excellence. The Shingo model may be used as a benchmark for what excellence at the highest level should look like. It may be used to align all elements of an organization around a common set of guiding principles and a proven methodology for transformation. Some use the Shingo model as the basis for organizational assessment and improvement planning. A few use the Shingo model as a way to recognize their associates for excellent work, and others use it to demonstrate to current and prospective customers that they can

compete with anyone in the world. Some use the Shingo model for all of the above.

The real **Shingo Prize**, however, is the business results that come from the relentless pursuit of a standard of excellence that is, without question, the most rigorous in the world. Those who use the Shingo model will embark on a journey that will accelerate the transformation of their organization into powerful, dynamic, nimble competitors.

No obstacle – affordable healthcare, efficient transportation, emerging global environmental concerns – will be beyond the reach of those who embrace principles of operational excellence. Leaders must make certain that every person deeply understand the principles that govern the consequence of their behaviors.

Principles of operational excellence are the only foundation on which organizational culture can be built with confidence that it will stand the test of time. Cultures built on principles and eliminate much of the normal variation of business and, to a large extent, become more predictable in their ability to execute on business strategy.

THE SHINGO PRIZE  

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*for* OPERATIONAL EXCELLENCE™



## THE SHINGO PRIZE FOR OPERATIONAL EXCELLENCE

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The Shingo Prize for Operational Excellence is a not-for-profit organization housed at Utah State University and named after Japanese industrial engineer Shigeo Shingo.

The Mission of The Shingo Prize is to create excellence in organizations through the application of universally accepted principles of operational excellence, alignment of management systems and the wise application of improvement techniques across the entire organizational enterprise. We do this by teaching correct principles and new paradigms that accelerate the flow of value, align and empower people, and transform organizational culture.

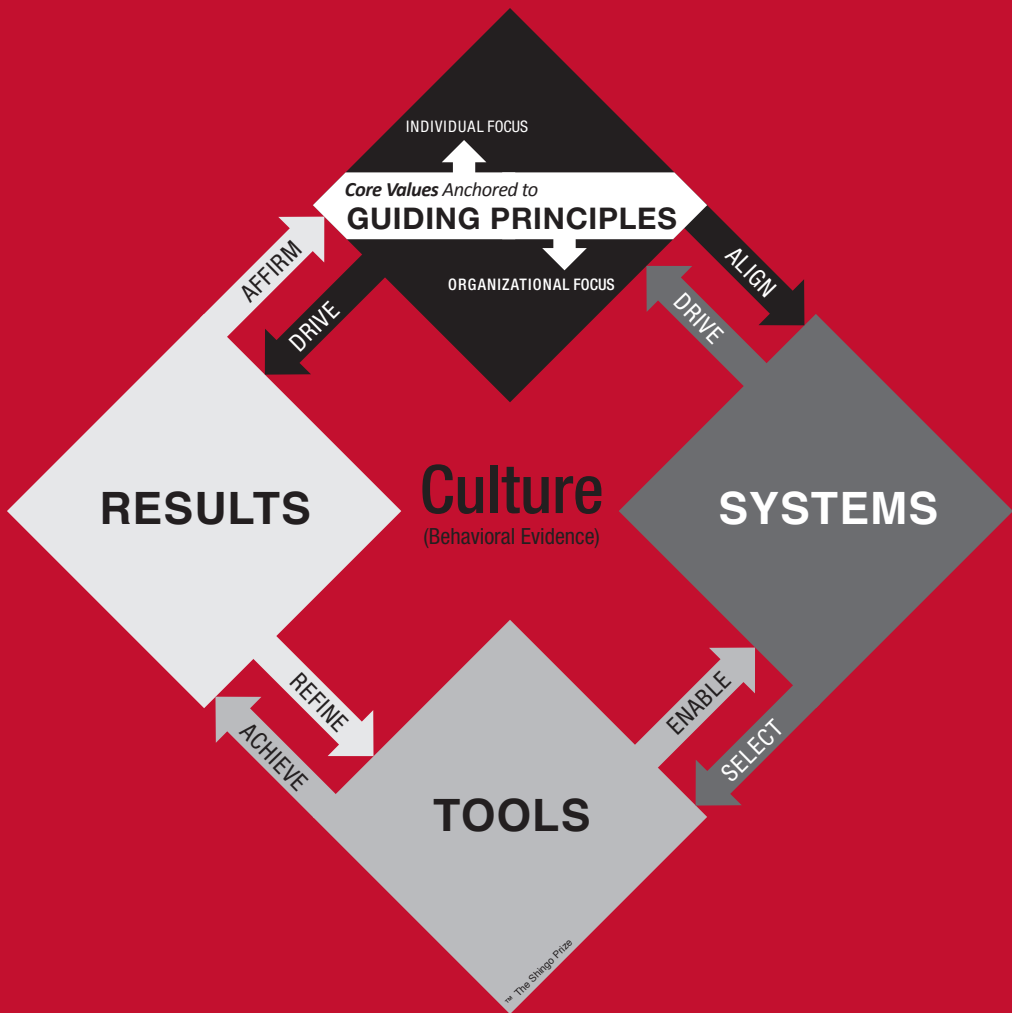
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