



ESSENTIALS

Introduction

No part of this material may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SOS Consulting, LLC.

Over more than two decades, we at SOS Consulting have used the concepts and tools of process quality improvement in manufacturing organizations of all sizes in diverse industries and seen amazing results for many organizations, but not all. This got us thinking about what are the key elements or essentials to create successful organizations that last through leadership changes, technology changes, and the ups and downs of the economy? After much reflection and research, we believe we have found the six essentials to create healthy, competitive organizations.

If your organization is not meeting targets or you are a leader frustrated by your organization's inability to obtain and sustain improvements in performance, we believe ESSENTIALS will:

- 1) Provide new insights that you can use immediately, and
- 2) Contain information you will want to share with your colleagues.

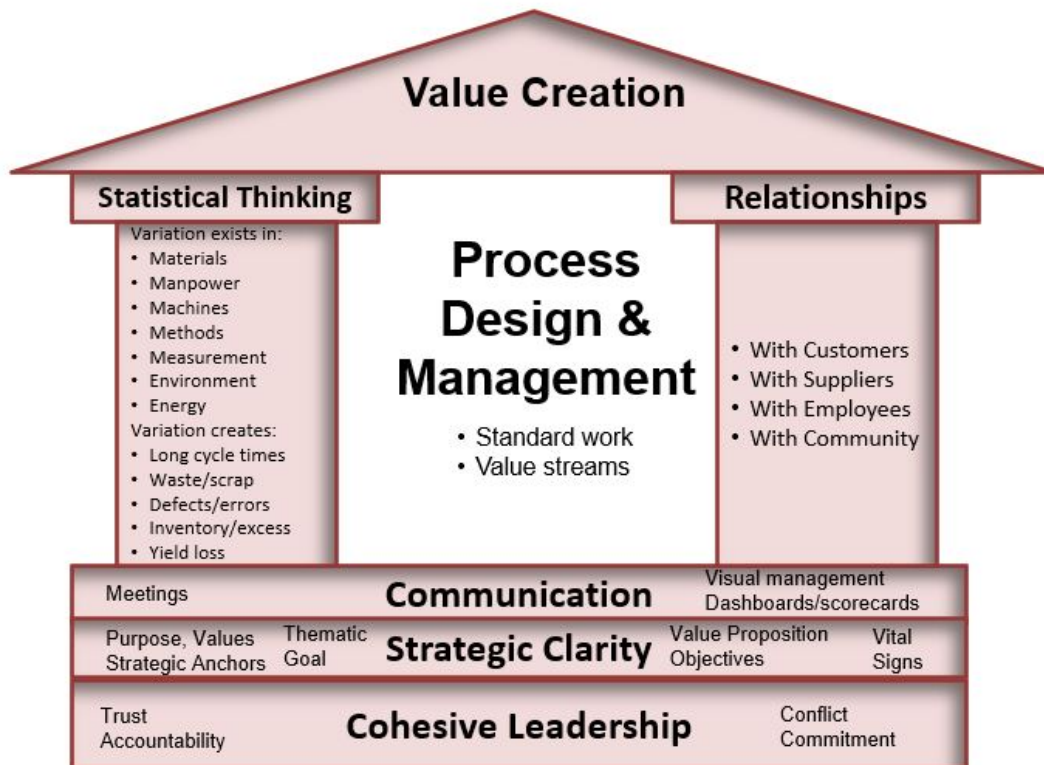
The business mindset of the last century taught that everything can be reduced to numbers such as cash flow and ROI. This numbers-based mindset encourages: a focus primarily on profit, functional thinking (silos), lowest cost supplier, and short-term thinking. The extension of this is that anything that cannot be expressed in quantifiable terms is not important enough to demand leadership attention. What about morale? What about the cost of an unhappy customer? This mindset extends into our culture, affecting other parts of our economy and daily lives.

There is a different mindset that focuses on six "essentials:"

- 1) Cohesive leadership,
- 2) Strategic clarity
- 3) Communication
- 4) Process thinking
- 5) statistical thinking, and
- 6) Relationships.

The six essentials can be depicted as a house— just like building a house requires all the right pieces to come together at the right time and place, the essentials are interdependent. We believe you will agree that the six essentials are not just for manufacturing, but have broad application in many settings: healthcare, education, banking, retail and nonprofits.

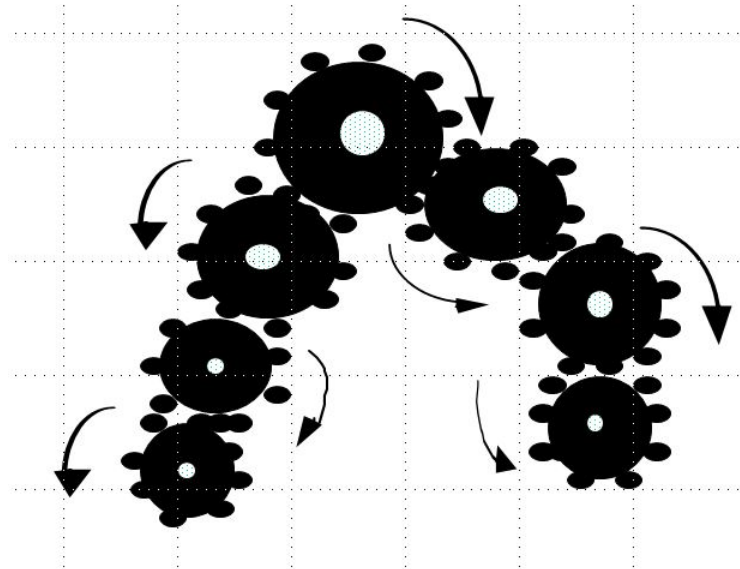
What makes an organization successful for the long-term? Beyond profit, what drives longevity? Let's agree that a successful organization is one that provides value to its customers/clients/volunteers/members/community. A manufacturing organization that provides value to its customers through its products and/or services will provide good living wages to its employees and shared value to the community over time. A hospital that heals and prevents disease (value) will transform the health of the local community through its care for community members. This is our objective, what we are aiming for; **value creation forms the roof our house**. The roof cannot stand on its own – it needs a foundation and load-bearing walls – things that synchronize the organization's internal systems with the external realities. We at SOS Consulting, call this *EXECUTION* - the synchronization of the business with the external realities (market, government, technology, culture).



So, how do you execute in a practical way to be successful in today’s rapidly changing world? Strategy? Technology? Training? Teambuilding? While these things are important and will probably be part of your path forward to some extent, the foundation to competitive advantage and longevity is **organization health** [1]. It **encompasses three of the essentials** needed for organizations to consistently identify and implement the “right things right.” No strategy, technology, training, or improvement initiative alone can give you peace of mind and organization success without organization health.

What is organization health? A healthy organization is one that practices three disciplines:

- 1) A cohesive leadership team –the leadership team trusts, constructively debates and holds one another accountable. If not, then that dysfunction will cascade throughout the rest of the organization. Think of an organization being composed of a series of gears where the senior leadership is the biggest gear and employees on the lowest level of the organization are the smallest gears [2]. One inconsistent communication or confusion about an activity’s importance or refusal to provide resources by a leader will spin its way throughout the organization, faster and faster as it goes down the organization chart resulting in silos, turf wars and disengaged employees



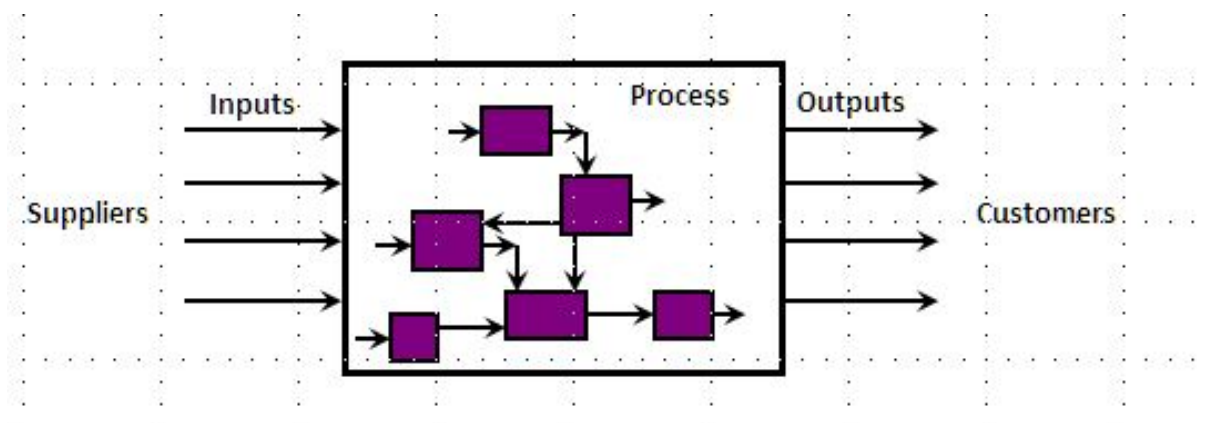
- 2) Strategic Clarity – the leadership team is aligned around answers to strategic questions on organization purpose, how to deliver value, and what is the most important priority for the next 12 months. With this clarity, the leadership team can decide how to position their organization in the market/community [3] and the strategic brick & mortar and infrastructure decisions aligned with that position⁴. This clarity establishes unique competencies across the organization. Simply following industry practice or tradition instead of developing unique position and competencies through strategic clarity results in competitive neutrality [4]. Making strategic decisions without clarity/alignment across the organization leads to confusion throughout the organization and spending resources on infrastructure and brick and mortar not aligned with the purpose.

- 3) Over-communicate clarity – leaders constantly communicate the truth and what is most important; they are transparent to a fault. With this, employees two, three and more levels down know exactly what they should do/know in their daily work to make the organization successful. Leaders reinforce clarity by constantly embedding the answers to the strategic questions into their managing systems/infrastructure (employee hiring & development, performance management, quality and safety systems). From daily check-ins to quarterly strategy reviews, meetings are structured to reinforce clarity and be fruitful (versus something to be dreaded). Tactical discussions and decisions are separated from strategic discussions/decisions to provide the focus needed.

Clear, Cohesive Leadership that Makes & Communicates Strategic Decisions throughout the organization form the strong foundation of our house.

All work is a process. A process is a series of steps/activities that transform inputs into outputs; raw material, information, energy, using labor, machines/tools and methods are transformed into products/services. Processes are the guts of how organizations make and deliver value

(product/service) to the market –from supplier to customer - **hence processes fill the rooms of the house as our fourth essential.** (Yes, we have not yet provided the walls to support the roof, but understanding process thinking will help describe the remaining two essentials that support the roof.) We tend to think of organizations as they are depicted in the organizational chart – a hierarchy of vertical functions. The real work to fulfill a customer need happens in processes that cross multiple functions [5]. Functional thinking results in people thinking more about what is best for their department than what creates value for the customer/community. If any of the functions is focused on anything other than that clarified and communicated by leadership, there will be a dis-connect: productivity/quality problems, confusion, turf wars, and disengaged employees.



Let's explore the impact of process thinking in a food company with a simple manufacturing process– the raw ingredients are added to a large tank and mixed for a specified amount of time and then dropped through a filling machine into metal cans, plastic jugs, and large totes with unique labelling. If R&D does not develop the recipe for the product taking into account the availability of the raw materials, material specifications, and/or operation of the equipment, the product may not be mixed or filled properly or at the scheduled time. If marketing does not get the labels with unique marketing information designed in time for the print vendor to print and deliver them, the product cannot be filled and delivered to the market per schedule. Typically everyone blames manufacturing for these failures; they do not understand that manufacturing is only one element of the **product fulfillment process**; manufacturing is dependent on the output of other functions. The company has a functional versus process view of delivering value to the market. This lack of process thinking can create an environment of mistrust and conflict that undermines cohesive leadership. We will explore process thinking at all levels of an organization and extend the concept to the worker or the human performance process in another paper.

The **fifth essential** is statistical thinking; it is one of the two exterior walls that support value creation. Variation exists in all processes. Manufacturing organizations experience variation in product, service, and process performance (yield, productivity, time, quantity, cost, product quality characteristics) [6]. The more variation a process is experiencing, the more the process must adjust to account for this variation, creating waste (defects, over production, inventory, and/or excess processing); this waste in turn produces more variation in the process. Variation can enter a process through its inputs (material, energy, information, and environment) or the

activities (people, methods, measurements, and machines/equipment) that transform those inputs into products/services. This variation can result in poor quality and/or inefficient operations. Variation and processes are intertwined and can be difficult to separate as variation in a process can create additional steps in the process (such as a re-work step) or alternative paths which create more opportunities for failure and longer processing times. A highly variable process is unpredictable and more costly to operate. Failure to incorporate variation into product and process design and management can negatively impact an organization's ability to deliver value. Note: The focus of statistical thinking is not on the data, but on using the statistics to tell the "story" of the product/process so the sources of variation can be identified and if not eliminated, minimized.

The last essential which forms the second exterior wall supporting value creation is relationships.

Organizations interface with customers, suppliers, employees and the community on a daily basis in many ways. If the relationships are not "win-win," where customers, suppliers, employees, and community are respected and engaged in delivering value **together**, these relationships will be weak. Over time, customers will seek alternative products/services, suppliers will not respond in a timely manner to requests for materials/information, and/or employees will leave the organization to work elsewhere, reducing the organization's ability to deliver value. This in turn may cause the community to lose jobs, funding and protection of public health, safety, and the environment (shared value).

Bottom-line, when variation is managed in processes that are clearly aligned and communicated by a cohesive leadership team in relationship with customers, suppliers and employees, productivity and quality problems often take care of themselves. Silos and conflicts disappear and relationships improve without any complex analysis tools; value is created for the entire community.

SOS Consulting believes any organization can improve execution to address their challenges to create value and be successful over time with the six essentials of cohesive leadership, strategic clarity, communication, process thinking, statistical thinking and relationships.

Essentials Work Across industries

The six essentials have been proven to work across industries, time, and cultures. Henry Ford intuitively recognized all these elements in the early 1900's as he built Ford from 100 cars per day to 1,000 per day. Line assembly combined standard horizontal processes (process thinking) with elimination of waste and training of low-skilled workers (process and statistical thinking), with a clear purpose and vision (clear, cohesive leadership) to democratize the automobile - all elements of what we recognize today as Lean Manufacturing or the Toyota Production System. Ford did not, however, have a structured management system (strategic infrastructure and communication) to document and embed these elements into daily work and leadership decision-making, so when he became ill and others took over leadership of the company, these concepts were lost and financials became the focus. This changed Ford manufacturing so much that when Ford executives visited Toyota in the 1980's to learn of the Toyota Production System,

they did not recognize it as their own. The six Essentials cross cultures and time – they work in organizations beyond the US 100 years ago and today.



Today, non-automotive industries, including healthcare, education and government are applying these concepts to their operations. One such organization is the Charleston Area Medical Center (CMAC), a 2015 Malcolm Baldrige National Quality Award winner. CMAC has a strategic vision to be recognized as the best healthcare provider in West Virginia by improving the health and economics of the Charleston, WV community. The CMAC leadership system is built on their mission and five vision pillars, centered on patients and families (clear, cohesive leadership). Three key delivery systems, four key work processes and seven supporting processes are communicated through the organization using 26 methods, 15 of which are two-way and includes partners, patients and families (processing thinking and communication). The Six Sigma DMAIC improvement process is used to understand variation/deviations in process performance and take action to remove root cause(s) (statistical thinking). Improvement best practices are embedded into daily work through work teams, single point lessons and procedures (strategic infrastructure and communication). To address their organizational challenge of recruiting competent staff, CMAC has an initiative to “Grow Our Own” focused on internal training and education (strategic infrastructure). This implementation of the six essentials has led CMAC to be recognized by Healthgrades in the top 5% for quality in both 2014 and 2015 and has resulted in cost reductions estimated at \$155 million since 2002.

These are just two examples, one manufacturing and one non-manufacturing, of the impact of the six essentials on organization competitiveness. The six essentials can probably be found in many other Malcolm Baldrige National Quality Award winners.

Why Not?

So, why don't more organizations do these things? That is a good question! We have some thoughts:

1. They do not know about these six essentials. They have not been taught in business school or executive training programs. Consultants (with the exception of SOS Consulting) that could bring these essentials to an organization are out of reach for most small-to-medium sized organizations. Plus, there have been so many improvement fads over the last 3 decades that leaders have become tone deaf to learning new concepts/mindsets. They also have many misconceptions, including that the essentials only apply to large manufacturing organizations

2. Even if they know. It is not perceived as the “smart” thing to do. Business school and executive training programs teach leaders the “smart” analytical tools (financial analysis, competitive analysis, strategy, sales & marketing), but not the softer team tools/skills. The old mindset that it is not important/ useful if it cannot be expressed in numbers is strong.
3. It is hard, and at times, messy work. It involves people – the most unpredictable element in any organization. And, since most senior leaders are men, they don’t want to appear “soft” by engaging in this work.
4. It is neither linear nor reproducible – the path taken by each organization will be different and perhaps different at each stage of its journey. So, leaders do not get to practice it much and get good at it. (Practice makes perfect.)

Why Manufacturing?

If these essentials apply to all organizations, why does SOS Consulting limit its focus to small manufacturing? We are passionate about improving US manufacturing. Many leaders of small to medium sized manufacturing organizations feel like they are treading water. They solve one productivity or quality problem to uncover or create more, cannot keep up with the changing markets and technology, question their leadership, and dread going to work to face the politics and conflict surrounding these problems. They are underserved. It does not have to be this way! Despite our large corporate experience, we understand that small companies do not have the resources, staff and matrixed organization of large companies to develop and execute the essentials for success – it takes focus, time, and culture change. At SOS Consulting, LLC, our primary mission is to help small US manufacturers be successful over time, through the ups and downs of the economy, so they can provide living wages to their neighbors and leave a legacy for their community.

Manufacturing accounts for approximately 13% of the US GDP (down from high of 23% in 1972 – just 40+ years ago). On average, manufacturing supports 1 in 6 service jobs; for every \$1 spent in manufacturing another \$1.32 is added to the economy – the highest multiplier effect of any economic sector. The average manufacturing worker’s annual wage is \$77,506 while the overall annual wage across all categories is \$62,546 (a \$15,000/year premium). Manufacturing is the key to restoring the middle class and our economy.

Some more staggering statistics: US small manufacturing has borne the brunt of the recent economic recessions. Over 63,000 US factories have closed since 2000¹; manufacturing employment has decreased by 21.8%² and wages have declined or stagnated³ (maybe you know someone impacted by this). While production moved off shore, US small manufacturers lost the capability to compete; they often have limited ability to design new products, serve customers, and solve problems. In addition, they typically have outdated equipment and a narrow manufacturing and/or product focus.

We fear the US has lost the capability to bring manufacturing back after 10-15 years of outsourcing and an aging workforce.

Manufacturing still accounts for 68% of private R&D and 90% of US patents. The US spends over \$250MM per year on economic development and research. Most of this goes to large corporations that have flexible capacity, staff, and matrixed organizations for implementation. Yet 94% of all US manufacturers have less than 100 employees. Small to medium-sized manufacturers are often over looked and underserved by our national and local economic development and research efforts.

Small and medium manufacturers are the bedrock of our communities.... We need to help them succeed!

References

1. Patrick Lencioni, *The Advantage: Why Organizational Health Trumps Everything Else in Business*. Jossey-Bass, 2012.
2. 1Brian L. Joiner, *Fourth Generation Management*. McGraw-Hill, 1994
3. Tracey, Michael and Wiserman, Fred, "Customer Intimacy and Other Value Disciplines," *Harvard Business Review*, Jan-Feb, 1993.
4. Hayes, Robert, Pisano, Gary, Upton, David, and Wheelwright, Steven. *Pursuing the Competitive Edge: Operations, Strategy and Technology*. Hoboken, NJ: John Wiley, 2005.
5. Rummler, Geary A. and Brache, Alan P. *Improving Performance: How to Manage the White Space on the Organization Chart, 2nd Edition*. San Francisco: Jossey-Bass Publishers, 1995.
6. Hoerl, Roger and Snee, Ronald. *Statistical Thinking: Improving Business Performance*. Pacific Grove, CA: Duxbury, 2002.



Transforming small US
Manufacturing workplaces into
places that work for all and
COMPETE today and tomorrow