



## ESSENTIALS

Relationships

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.

The sixth essential in our model is Relationships. Relationships play a key role in supply chains. If manufacturers don't get them right, they will feel the consequences from suppliers to customers.

Human beings are wired to interact with others. God created Eve as a companion for Adam.

According to Maslow's hierarchy of needs, humans need to feel love and acceptance from social groups (family and peers). This need is so strong that it can overcome physiological and safety needs, such as a child's attachment to an abusive parent.

Relationships can be rewarding in both tangible and intangible ways. Some models propose that relationship satisfaction is based on rewards, costs and comparisons. Through relationships an individual can gain employment, family, and love with the risk of hurt at the loss of any one of them.

*Truth is everybody is going to hurt you; you just gotta find the ones worth suffering for.*

- Bob Marley

Relationships also help individuals develop a sense of self. One's emotions and behaviors are shaped by our prior relationships, particularly of those individuals or groups in our life.

Power is the ability to influence the behavior of others. When two parties have or assert unequal levels of power, one is termed "dominant" and the other "submissive." In a manufacturing environment, this can be seen in the relationship between a supervisor and operator in which the operator follows orders without question. A hierarchical organization (as typically depicted on an organizational chart) may use a dominant hierarchy or top-down management style. As we have discussed in previous papers on process thinking, such management may overlook how the work actually occurs and not fully serve customers. In business, dominance is often associated with economic power. A business may adopt a submissive position to customer preferences and only stock what customers want to buy. Or, a business may adopt a dominant position when it demands price concessions from a supplier in order to guarantee a minimum order quantity.

The procurement function in a manufacturing organization is at the center of many business relationships – material and service suppliers that enable the manufacturer to produce a quality product at reasonable cost and time. The misconception is that procurement is all about cost – finding materials and services at the lowest possible price. But it is really all about managing relationships with suppliers. Buyers that work collaboratively with their suppliers are better placed to get compliance and to be granted access to information needed for problem-solving and innovation. On the other hand, in a transactional or arms-length relationship, a buyer may not get compliance, timely responses or the information needed to solve problems and innovate. A relationship with greater involvement is known as a strategic alliance. It is a relationship in

which both organizations work together for mutual benefit to leverage each other's strengths to create synergy, creating a competitive force in the industry.

There are many possible relationships within an organization:

- Within the leadership team – see our previous paper on the essential of Cohesive Leadership
- Between leaders and employees – these relationships can be dominant, submissive or collaborative. See our previous paper on the Human Performance System to understand the impact of this relationship on performance of employees in the workplace.
- With customers - knowing and understanding customer needs is critical to the design of products and services. Without a relationship that fosters open, honest sharing of needs, products and services may not meet needs, resulting in the loss of market share and potentially profitability. Our next section will share ways of obtaining the “voice of the customer” (VOC)
- Within the industry – relationships within the industry allow the sharing of information and leveraging of resources to solve common problems. Many industries have industry associations that research common problems and represent the industry to the public.
- With the community – The community in which an organization exists is both a supplier and customer – a supplier of the workforce, services (utilities, safety and health resources) and natural resources in the area; a customer of the products, services and jobs created. Many manufacturers find it beneficial to work closely with local educational institutions to ensure an educated workforce and opportunities for existing employees to develop new skills are available. Also, to ensure that resources and plans are in place to deal with any natural disasters or events that would disrupt operations (fire, explosion, transportation mishap) can be handled quickly and smoothly. Communities also want to know and understand how the manufacturer may be impacting the local environment and local economy– are they disposing of waste properly and do they support local suppliers.

In summary, organizations are also wired for relationships. Internal and external relationships are at the heart of everything an organization does. What are you doing to strengthen your organization's relationships?

### **Understanding Customer's Needs**

With all the money spent on market research and customer surveys, it is easy to assume that you have a pretty good handle on the needs of your customers. All the hype about the “Internet of Things” (IOT) also gives the false sense of security that organizations know their customer needs. Consider that although point-of-sale data-gathering technologies (scanners, smart cash registers, and credit card systems) have been around for almost three decades, it has only been in the last few years that data from retail store scanners have been used to create automatic replenishment programs that send reorder notices to product manufacturers. And, quantity

data is the easiest to gather and respond to. Much more difficult is data on product characteristics that will delight the customer and product usage.

Without a clear grasp of customer needs, product and service development initiatives are plagued with shifting demands for features and functions based on “new data” about customer needs and priorities. While some fluidity around requirements is expected, this is a sign of poor understanding of the customer.

So, how does an organization go about obtaining the “voice of the customer”? First step is defining the organization’s customers. Seems obvious, but this first step is often overlooked. Customers are recipients of your organization’s products and/or services. Customers may be internal or external. Internal customers use the outputs from a previous internal process while external customers pay the bills. We will focus this paper on the later, the external customer. A good way to define the customer is to “segment” those currently purchasing your product/service by industry, product offerings, services and features and then determine the volume purchased or share of revenue for each segment. Often, it is found that the costs of supporting some customer segments make them *unprofitable*. This in turn leads to some tough strategic decisions to either abandon the customer segment or to focus efforts on serving only those customer segments that best match the organization’s strategy and profitability goals with the unprofitable segment(s) either moving to the more profitable products or self-selecting to go elsewhere to have their needs met. This must be done while avoiding the squeaky wheel – upset existing customers or those with special needs that test your organization’s capabilities and could go around telling the world their horrible experience doing business with your organization (easy to do today with social media). You will want to make sure that you hear their needs (after all they are paying your current bills) while seeking input from prospective customers. The key is to balance and diversify efforts to learn from a variety of customers: current happy customers, current unhappy customers (those that complain and those that do not), lost customers, competitor’s customers, and prospective customers.

The second step is to determine what data you need to gather to understand customer needs. VOC tools are used to describe customers’ needs and their perceptions of your product/service that can be translated into specific product/service requirements for product/service development and improvement. These tools involve both reactive and proactive sources of information. Reactive data sources are data sources that already exist such as customer complaints data, customer feedback, customer special requests, and industry data bases. Proactive sources do not yet exist and require some action on your part to gather. Proactive sources include customer surveys, customer interviews, focus groups, and customer observation. It is recommended to use a blend of sources. A VOC data collection plan will help organize your approach, make it visible and easier to evaluate for breadth and diversity of information and customers. A simple matrix like that represented below is sufficient to capture the plan and summarize learnings:

Customer Segment	What Information & Why	Reactive Sources	Proactive Sources	Summary

Since proactive sources will require some design and planning on your part, we'll focus on four common tools next.

#### Proactive Customer Interview

The customer interview can be an important information gathering technique to understand needs not obvious from reactive sources of data. It can also foster a cooperative working relationship with your customer. It is key, however, to design the interview carefully – the wording and order of the questions, the location and length of the interview. A location that is comfortable for the customer is preferred, perhaps in their place of work. It is also recommended that you tell the customer in advance how long the interview will last. Questions should be open-ended such as:

- “Tell us how you use our product/service...”
- “What barriers do you face with our product/service?”
- “Tell me about...”
- “Give me an example of....”
- “What other solutions have you tried?”

It is then critical that you truly listen to the responses and ask follow-up questions to dig deeper. For this reason, it is helpful to conduct customer interviews in pairs with one person asking the questions and the second taking notes. The advantage of customer interviews is that you can dig deeper into the response to your questions, observe customer body language (as useful as the words they speak) and build a cooperative relationship with the customer. The disadvantage is that it can be time consuming especially if you have many customer segments to interview.

#### Proactive Customer Survey

A customer survey can more easily measure a customer's likes, dislikes and perceptions of your product/service. Like a customer interview, it must be well-designed. The format and administration (paper, web-based, phone/text) of the survey must be selected for the ease and comfort of the customer (not everyone is comfortable using on-line surveys). The questions should be short, simple and relevant to your objective and the product/service used by the customer. Since the customer will not be able to ask for clarification of a question, it is important to define terms and to make sure you are asking one question at a time. The

advantage of a survey, especially if it is administered on-line, is that you can gather a large amount of information in a relatively short period of time. It is also easier to get measurable responses on a scale (1-10 or strongly disagree to strongly agree) or to get a ranking/prioritization of needs. The disadvantage is that you cannot dig deeper into the responses without doing a follow-up survey or interview.

### Proactive Customer Focus Group

A focus group is a small group of people who are asked about their perceptions, opinions, and attitude toward a product/service in an interactive group setting where participants are free to talk with other groups participants. Like the customer interview, the wording and sequence of questions, location and length need to be well-designed. A focus group is useful when the desired information about behaviors and motivation is more complex than a survey is likely to reveal and when a dynamic interchange between group members may result in more in-depth and unbiased information than one-on-one interviews. Focus groups may take less time than one-on-one interviews but more time than a survey.

### Proactive Customer Observation

Customer observation or **ethnography** is people watching with a purpose to gain deeper insight into unmet needs, myths about how he customer uses your product/service and problems experienced by the customer.

*"What people say, what people do and what people say they do are three different things."*

- Margaret Mead, Anthropologist (1901-1978)

Ethnography takes more planning and practice than the three proactive tools described above. Customers must be identified and a location to observe identified and approved. A location that allows for unobtrusive observation without influencing customer behavior is needed. Instrumentation like cameras, audio recorder, stop watch may also be needed. Practice is required to notice the little things a customer does/does not do and to look for the unexpected. The real advantage of using ethnography is the potential identification of unknown, unmet needs

Once you have gathered this data, how do you translate it into meaningful, useful information that can be used for product/service development and improvement? This will be the subject of our next paper. In the meantime, review the sources of data you have on your customer needs and evaluate whether it is providing the full voice of the customer.

### **Translating the Voice of the Customer into Key Requirements and Insights**

Once you have gathered data/information from the customer, the key is to translate that information into measurable requirements that can be used for product/service design and improvement of the relationship.

The data from interviews, focus groups, observations, and some surveys are typically not numerical, but in the form of text (words, phrases). Statistics such as average and variance cannot be calculated on this type of data. So, how does one analyze it to identify measurable requirements that provide insight into customer's needs (spoken and unspoken)?

To facilitate description of several tools used for such analysis, we will use an example: Terry and Sherry own a small pizza shop in a small town in rural America. They have been in business for 20 years and have a loyal following of customers. However, a new highway is being built that will open up new land and encourage national fast food restaurants to move into the area. Wanting to get ahead of this potential situation, Terry and Sherry engage their customers in interviews and surveys to understand what draws them to Terry's Pizza and what would delight them and keep them ordering pizza after the new highway is built. They also observe what types of pizzas are most frequently ordered and what customer's request that they do not offer. Responses include (number of responses in parentheses):

- |   |                                       |
|---|---------------------------------------|
| • Fresh ingredients (3)                           | • Fruit options                       |
| • Not cold (8)                                    | • Melted cheese and bubbly sauce (2)  |
| • Chewy crust (4)                                 | • Gluten-free options (2)             |
| • Completely covered in ingredients (5)           | • Low sodium options                  |
| • 'Right' ingredients – ingredients as ordered    | • Thick crust                         |
| • Multiple meat options (pepperoni, ham, sausage) | • Fast delivery (9)                   |
|   | • Friendly serve                      |
|   | • One stop for entire family meal (3) |
|   | • Large orders/catering               |

The first analysis should be an **Affinity Analysis**. This tool gathers large amounts of language data (ideas, opinions, issues), organizes it into groupings based on the natural relationship between each item, and defines categories that can be used in subsequent analyses. It is largely a creative rather than analytical process. As such, it allows new patterns or information to rise to the surface. While one person can complete an Affinity, it is strongly recommended that a team conduct the analysis to benefit from the melding of perspectives, opinions and insights. The steps to Affinity Analysis are:

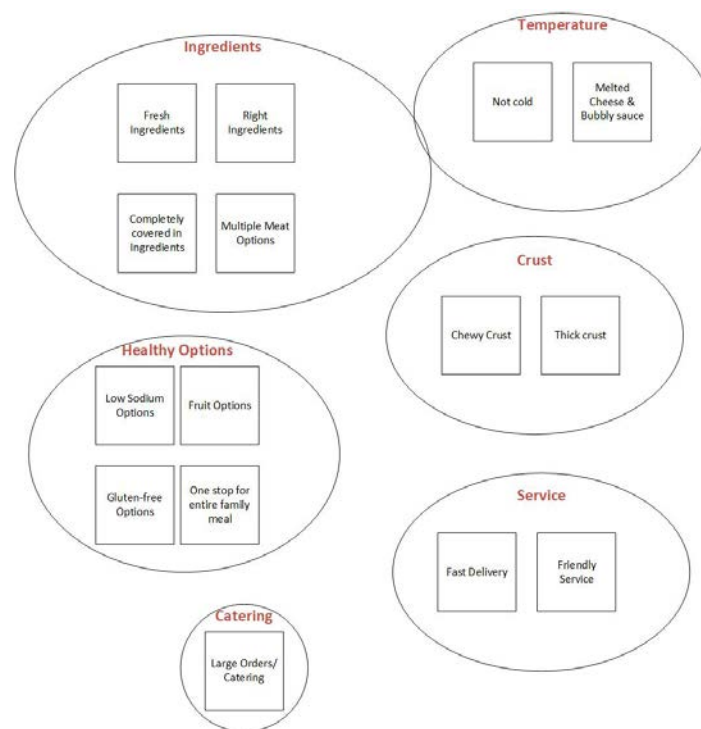
1. Print each individual customer response on a sticky note or 3x5 card in large print.
2. Spread all cards/notes on a flat surface (large table or wall) where all can easily see each response. Be sure to leave enough space in front of the work surface to enable five or six team members to easily see and move the cards/notes
3. Ask team members to **silently** look for cards/notes that are related to each other and move them close together. Repeat until no one can move any cards/notes. Do not force single cards/notes into groups. These "loner" cards may form their own grouping and provide insight into an unmet need. Silence during this step will encourage



unconventional thinking and help to minimize “overthinking” relationships. Avoid sorting cards/notes into “safe,” known categories.

4. Circle the resulting groupings.
5. Discuss each grouping to identify the ‘central idea’ that ties all the cards/notes together. This idea should reflect not only the content of the cards/notes, but the “spirit” of the grouping. This spirit may be found from responses to interview questions that dug deeper into a customer response or from an observation of customer behavior. Groups may be split or combined based on these discussions, again being careful to avoid using known, “safe” categorization. Place this idea (in form of short phrase or single word) on a different colored, larger sticky note or card and place at the top of the grouping.

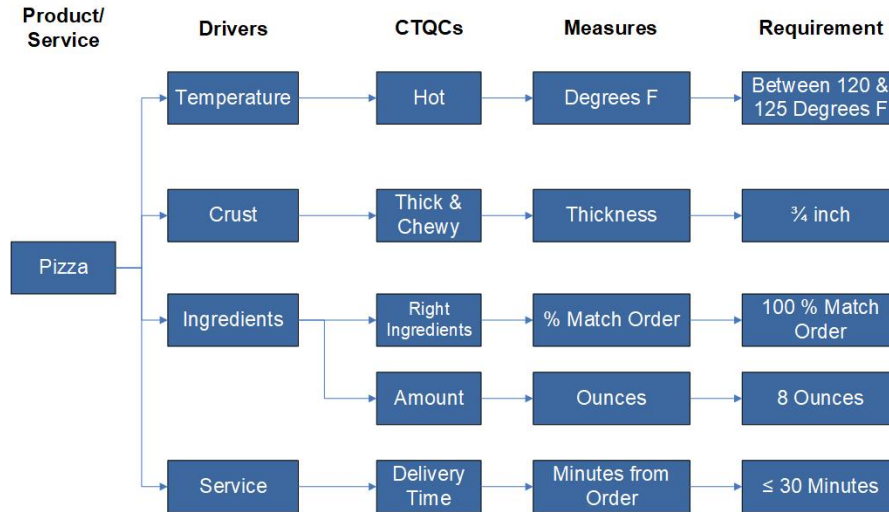
A graphical representation of Terry’s Pizza Affinity is shown below:



A simple graphical tool that takes the Affinity Analysis to the next level to identify measurable requirements is the Critical to Quality Tree or CTQ Tree. To create the CTQ Tree, we take the categories identified in the Affinity, called “drivers” in the CTQ Tree, and ask “What does that mean?” We keep asking that question until it results in a measurable specification. The responses can be represented in a Tree diagram.

For example, what does Service mean? It means “delivery time.” What does “delivery time” mean? It means “delivered within 30 minutes.”

Graphically, the Pizza CTQ Tree looks like:



Not all customer needs are equal, some needs must be met, while others may not even be known or recognized by the customer. Another tool that can provide insight into the relative priority of customer needs is the Kano Model. The Kano Model is represented as a matrix in which the horizontal axis is the degree of attainment of the need; the vertical axis is a degree of satisfaction. This matrix can be split into four quadrants. Product/service characteristics with high degree of attainment and low satisfaction are characteristics that are taken for granted but missed when absent, they **Must Be** present for the customer to be satisfied. Must Be characteristics can be identified through one-on-one interviews and focus groups in which you can probe deeper into the responses. Product/service characteristics for which satisfaction increases as attainment increases are known as **More is Better**. They fall along the diagonal in the matrix. More is Better characteristics are best identified through surveys in which characteristics are rated on some numerical scale or ranges. Delighters are those product/service characteristics that are not expected and result in high satisfaction when at high attainment. These are most often identified in focus groups or through ethnography in which challenges with current product/service can be observed or in situations in which customers can share ideas. A good way to classify needs in a Kano model is to ask two questions for each potential need (CTQ characteristic, driver, Affinity group) – fill in the blank with the CTQ characteristic/driver/Affinity group header:

1. How would you feel if \_\_\_\_\_ was addressed?
2. How would you feel if \_\_\_\_\_ was not addressed?

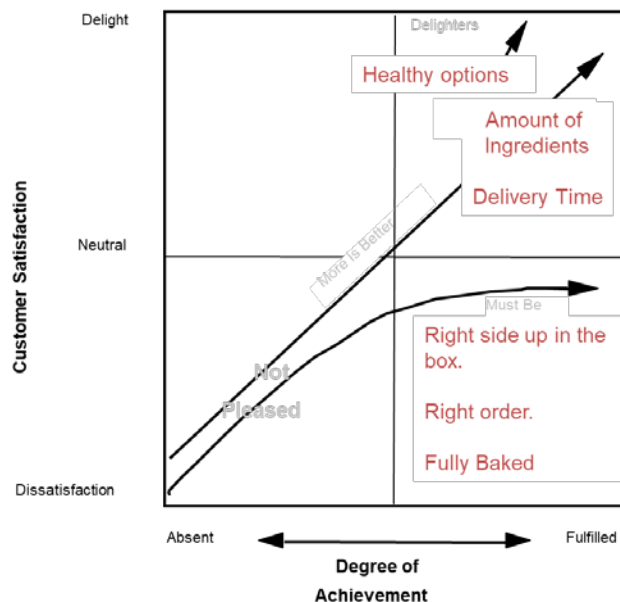
And giving four choices:

- I'd like it
- I expect it
- I don't care
- I'd not like it

Identify where to place the CTQ characteristic using the following relationships:

Feel Addressed	Feel Not Addressed				
		Like	Expect	Don't Care	Don't Like
	Like	-	Delighter	Delighter	More is Better
	Expect	-	-	-	Must Be
	Don't Care	-	-	-	Must Be
	Don't Like	-	-	-	

The Kano model for our pizza example might look like this:



When you know the needs in measurable terms and by type, that knowledge can be used to choose between product/service design options that will best meet your customer needs. A Pugh Matrix is useful for this. A Pugh Matrix compares options against the needs. The needs are listed in the first column. The current design is rated on each need in the second column. Subsequent columns are used to rate each potential design against the current design where the ratings used are: S: Same; +: Better than; -: Less than

The option that best meets the needs considering requirements and type (Must Be, More is Better, Delighter) then becomes obvious or identifies additional design options that combine the best of two or more options.

For the pizza example, a Pugh Matrix comparing different menu options might look like:

Customer Need	Current State	Menu A	Menu B	Menu C
Right Ingredients (match order)	S	S	S	S
Thick Crust (3/4")	S	+	S	+
Ingredients Cover (8 oz each)	S	+	S	S
Delivery Time (within 30 min)	S	-	+	-
	+	2	1	1
Totals	S	1	3	2
	-	1	0	1

These Voice of the Customer tools are versatile and can be used with both internal as well as external customers. Don't forget internal customers. Using the essential of process thinking, we know that there is a chain of customers internal to the organization that must be aligned and focused on the external customer to consistently meet needs.

### Shared Value: Relationships with suppliers, employees and community

The last two sections we focused on the relationship with customers – those that purchase an organization's products/services. What about other relationships – with suppliers, employees and community?

Traditionally, many companies miss customer needs and ignore the depletion of natural resources that are vital to their businesses, the vitality of key suppliers or the economic distress of the communities in which they operate. Others remain stuck in a "social responsibility" mindset in which societal issues are at the periphery, not the core of the organization. The mindset is that to provide societal benefits, a corporation must temper their own economic success. For example, a requirement for environmental controls imposes a constraint on the corporation. Adding constraints invariably raises costs and reduces profits. Societal needs, not just economic needs define markets and social harms create internal costs for corporations. Externalities arise when firms create societal costs they do not have to bear such as pollution. As a result of externalities, society often imposes taxes, regulations or penalties for corporations to "internalize" these externalities.

At a very basic level, the competitiveness of an organization and health of the community around it are closely intertwined. A business needs a successful community to create demand for its products/services, to provide assets and a supportive environment. A community needs successful business(es) to provide jobs and wealth creation for its citizens.

The right approach lies in the principle of shared value which involves creating economic value in a way that also creates value for society by meeting its needs and challenges. Shared value is not about sharing value already created – a redistribution approach, but is about expanding the total

pool of value. This will require leaders to develop new skills and mindsets – a deeper appreciation of societal needs, an understanding of what generates productivity and the ability to collaborate across industries and across profit and non-profit boundaries.

*“Strive not to be a success, but rather to be of value.”*

- Albert Einstein

There are three distinct ways to create shared value:

1. Reconceive products and markets
2. Redefine productivity in the value chain
3. Build supportive industry clusters

#### Reconceive Products and Markets

Opportunities arise from serving disadvantaged communities in developing countries not traditionally recognized as viable markets. For example, low priced cell phones to provide mobile banking services to small farmers help them save money securely and transform their ability to produce and market crops. Vodafone's M-PESA signed up 10 million Kenyan customers in 3 years to handle 11% of Kenya's GDP.

#### Redefine Productivity in the Value Chain

Efforts to minimize pollution were previously thought to increase business costs through regulation and taxes. Today, major improvements in environmental performance can be obtained with technology at nominal cost and even result in cost savings through better resource utilization, process efficiency and quality. For example, Dow Chemical reduced fresh water consumption at one of its largest production facilities by 1 billion gallons, enough to supply 40,00 people in the US for one year, resulting in a savings of \$4 million.

In procurement, shared value calls for corporations to share technology and financing with suppliers, allowing suppliers to improve quality and productivity. As suppliers get stronger, their environmental footprint falls dramatically as well which further improves efficiency. Same applies to employee productivity. For example, Johnson & Johnson implemented numerous wellness programs for its employees and saved \$250 million on health care costs over a 6-year timeframe while reducing lost workdays and improving employee productivity.

#### Enabling Local Cluster Development

The success of every company is impacted by supporting companies and the infrastructure surrounding it. Productivity and innovation are strongly influenced by “clusters” or geographic concentration of companies, related suppliers, service providers, logistical infrastructure, educational institutions. Think Silicon Valley for IT, Detroit for automobiles and Research Triangle Park for life sciences.

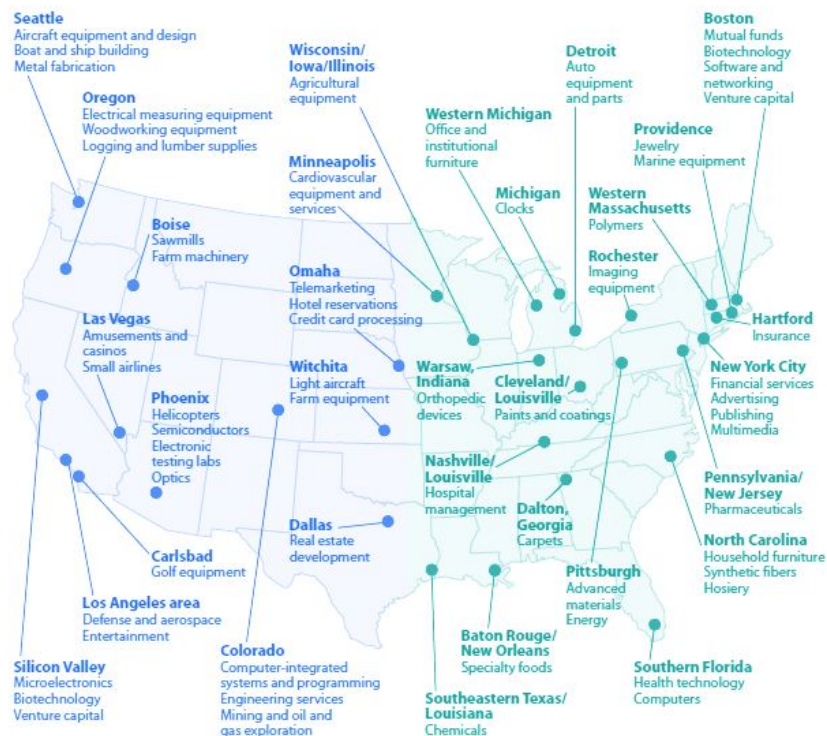
## Business Clusters: When the Sum is Greater than the Parts

Working together in teams brings more to a solution than working separately on the same problem – the sum is greater than the parts. This applies to manufacturing organizations, non-profits, government agencies, and communities. By connecting organizations, problem-solving relationships develop, the greater power of unique mindsets from different backgrounds and perspectives and the greater potential for creative solutions and innovative problem-solving.

Business clusters as defined by Michael Porter, is a “critical mass in one place of **linked** industries from suppliers, to universities to government agencies that enjoy competitive success in a particular field.” This critical mass has three important effects on competition:

- 1) Productivity of local companies is increased,
- 2) Innovation is stimulated, and
- 3) New businesses within the cluster are created.

The US Cluster Mapping Project along with the US Economic Development Administration has identified clusters around the country and has resources to support new and existing clusters in partnership with the Harvard Business School's Institute for Strategy and Competitiveness (see <http://clustermapping.us/about> for more information):



A well-known cluster is Silicon Valley. In the mid-to-late 1990s several successful tech companies emerged in Silicon Valley. This led others to create start-ups in the Valley. The surge in start-ups led a number of venture capital firms to relocate or expand offices in the Valley. All of which encouraged more entrepreneurs to locate there. This cluster effect also led to an effect in the labor market. As the number of tech companies increased, programmers, engineers and other tech professionals realized they would find greater job opportunities in the Valley. This concentration of technically skilled people meant that more start-ups would find their chances of finding candidates with the proper skills higher in the Valley, giving them incentive to move there, which gave tech workers more incentive to move there, continuing the cycle and strengthening the cluster.

Manufacturing is a natural fit for clusters by its very nature. Manufacturing is complex; its production processes increase the demand for raw materials, energy, construction, and services from a broad array of supplying industries. Additionally, many functions from back-office operations, accounting, and logistics are contracted to other service providers. As the demand for the manufacturing goods grows, it spurs the creation of jobs, investment and innovations elsewhere. Every dollar in sales of manufactured products supports \$1.34 in output from other sectors – the largest multiplier of any sector (compared to the retail sector at 55¢ and transportation/warehousing at \$1).

Governments and companies often try to use the cluster effect to promote a community as a good place to locate operations. For example, the San Antonio, TX biosciences cluster, a 750-acre tract that has evolved through the concerted efforts of the San Antonio Economic Development Foundation, into a complex of 20 hospitals, research facilities, and biomedical manufacturers, that accounts for 40,000 jobs.

24 communities were designated in 2014-15 as “Manufacturing Communities” under the Obama Administration’s Investing in Manufacturing Communities Partnership (IMCP) initiative, sharing over \$2 billion in federal funding. The designation was designed to accelerate the resurgence of manufacturing in communities nationwide by supporting the development of long-term economic development strategies by encouraging communities to take a more thoughtful, comprehensive approach to their strategic plans to address: workforce and supply chain challenges; infrastructure; research and innovation; trade and investment; capital access; and operational improvement for manufacturing companies in partnership with the private sector, local government, higher education, local economic development organizations, and nonprofits. The communities included:

- The Greater Pittsburgh Metals Manufacturing Community led by Catalyst Connection, Pittsburgh, PA.
- The Alamo Manufacturing Partnership, led by the University of Texas at San Antonio in the San Antonio, TX metro area.

- The Louisiana Chemical Corridor led by Louisiana State University, stretching from New Orleans, LA to Baton Rouge, LA.
- The Madison Regional Economic Partnership (MadREP) in the Madison, WI region.
- The Made in the Mid-South Manufacturing Alliance led by the Greater Memphis Chamber spanning five counties in surrounding Memphis, TN.
- The Central Valley AgPlus Food and Beverage Manufacturing Consortium led by California State University in Fresno.

Interested in starting a business cluster in your community? Ken Trevett, President and CEO of the Texas Biomedical Research Institute suggests the following for organizing an industry cluster:

- Identify an advocate or advocacy group. High quality programs are important, but not sufficient to garner and maintain public support. A strong advocate promotes and unifies the effort across the community.
- An advocate with team instincts and expertise to build teams are more important than detailed knowledge of the industry.
- Resource the advocate/advocacy group from the time of inception with professional and support staff, marketing/advertising and travel budgets.
- Develop effective communications with elected and appointed officials at the local, regional, and state levels.
- Liaise with other relevant organizations such as universities and economic development groups.
- Develop good relations with members of the local news media and trade press.
- Stay focused on the mission and goals, not public policy or picking winners and losers.

The six essentials can be used/leveraged to support the development and maintenance of business clusters through cohesive leadership, strategic clarity and aligned communication. Incorporation of process and statistical thinking and a focus on the customer within the cluster will strengthen relationships while increasing productivity and innovation.

*The need for connection and community is primal, as fundamental as the need for air, water, and food.*

- Dean Ornish

### Corporate Social Responsibility vs Shared Value

So how is shared value different from corporate social responsibility?



Corporate Social Responsibility	Shared Value
Taking resources from business, investing in being a good corporate citizen (recycle waste, give to local social causes, encourage volunteerism among employees)	Changing core of how operate – strategy, structure, product design, and processes – to deliver higher profits while creating value for society
Redistribution of value	Increase total value
Share company products, expertise and talent	Redesign products, access new markets, reconfigure value chain, improve capability of suppliers
Sustainability, compliance, risk management	Clusters of related supplies, service providers, logistical infrastructure and educational institutions
Cause marketing, reputation management	Deploy assets to achieve scale and spur investment

### The Employee Relationship: The Happiness Advantage

Many of us were raised on the belief that if you work hard, you will be successful and once successful will be happy. With each accomplished goal, however, the goal posts of success are pushed further out until happiness is pushed over the horizon.

Research in psychology and neuroscience proves that the formula is backwards- happiness is the precursor to success. Happiness fuels performance, creating a happiness advantage. Waiting for happiness actually limits our success. The results of over 300 studies involving 275,000 people around the world concluded that happiness leads to success in every domain of life.

### What is Happiness?

Happiness is difficult to define - it is in the eye of the beholder. Some researchers prefer to use “positive emotions” or “positivity.” Ten common positive emotions are: joy, gratitude, serenity, interest, hope, pride, amusement, inspiration, awe, and love.

*“Happiness is not belief that we don’t need to change; it is the realization that we can.”*

Data shows that happy workers have higher productivity, create higher sales, perform as better leaders and receive higher performance ratings and higher salary. As a result, they enjoy greater job security, take fewer sick days, quit or become burned out. The quickest way to high achievement is not a single focus on work; the best way to motivate employees is not to bark orders or foster fear, but happiness.

*“The mind is its own place and in itself can make a heaven of hell, and a hell of heaven.”*

- Milton

In his book, *The Happiness Advantage*, Shawn Achor identifies seven principles that fuel performance at work:

- 1) **Happiness Advantage:** Positive brains have a biological advantage over negative or neutral brains. Negative emotions generate adrenaline, narrowing our action down to fight or flight. Positive emotions flood the brain with dopamine and serotonin, chemicals which make one feel good and refuels the learning centers of the brain; positive emotions broaden the mind, making one more thoughtful, creative, and open to new ideas.
- 2) **Fulcrum and Lever:** How we experience the world and our ability to succeed constantly changes our mindset. We can adjust our mindset (the fulcrum) in a way that gives leverage (lever) to be more successful.

*"Give me a lever long enough and a fulcrum on which to place it and I shall move the world."*

- Archimedes

- 3) **The Tetris Effect:** When our brain is stuck in a pattern of stress and negativity, we set our self up to fail. We can actually train our brain to capitalize on possibility.
- 4) **Failing up:** In the midst of defeat, stress or crisis, brains map different paths to cope. The key is to find a map that leads up and out of failure into happiness and success.
- 5) **Zorro Circle:** When challenges loom, you get overwhelmed and the rational brain can get hijacked by emotions. We can regain control by focusing on small manageable goals that we gradually expand to bigger ones.
- 6) **20 second rule:** Sustained change feels impossible as will power is limited; when will power is low, we fall back on habits and allow the path of least resistance. A small energy adjustment can reroute the path of least resistance and replace bad habits with good.
- 7) **Social investment:** Successful people invest in friends, peers and family. In *Delivering Happiness*, Tony Hsieh talks about this as "connectedness," a meaningful sense of community within a team of people that supports honesty, respect and openness which creates psychological safety.

Happiness is not just a mood, but a work ethic. We are not born with a fixed happiness level; we can control our happiness level. Are you happy? Are your employees happy? Start increasing your own positive emotions by trying one or more of these:

- Meditation
- Finding something to look forward to
- Surround self with positive things (photos of people and things we love)
- Spend money on experience and/or people we care about
- Exercise unique strengths
- Perform acts of kindness

## Creating Joy at Work

*“Management’s overall aim should be to create a system in which everybody may take joy in his work.”*

– W. Edwards Deming

Joy at work? Yes, joy at work. We are not talking about ping pong tables, snacks, bringing your dog to work or any of a number of other perks some have suggested improve or sustain employee morale.

Research on positive psychology finds that shortcuts to happiness, joy, elation, and comfort are ineffective. Rather, developing and exercising personal strengths and virtues of character with strong relationships leads to happiness. People who have a strong community of relatives and friends are happier than those who have few friends and only distant relatives; those who are optimistic and hope in achieving a positive goal are happier than those who are pessimistic or feel hopeless.

There are 5 key factors that lead to a happy life with direct implications to creating a happy and productive workplace:

1. Strong social relationships. Joy is rarely derived alone; it most likely comes from a strong social network, teams and teamwork in the workplace. For centuries, the family farm and craft shop provided social relationships, security and happiness. Mass production led to isolation and alienation. The formation of unions in which members call each other “brother” created social bonds and was as much an act of psychological survival as protection of worker rights.
2. Strengths/Competencies. We all have strengths. A healthy workplace is composed of people with diverse strengths that are brought together as an orchestra playing in harmony. Every member of the organization should be respected for what they bring to the team and have opportunities to build on those strengths. The greater the ability to contribute to the team, the greater the self-worth of the individual. Doing the same job day after day, year after year is deadly. Workers need to be trained to do multiple jobs. This increases the flexibility of the process and increases every workers ability to improve the process. Being part of an effective team and being able to help others in their work brings joy.
3. Money to a point. Money does not motivate. While income has a positive relationship with happiness (life satisfaction), it is not a straight line. As income increases its added contribution to happiness becomes smaller; the impact of additional income is greatest among those who have little income and little impact once someone is able to meet basic needs. Money does, however, effect behavior when there is a contingency, an if-then relationship between performance and money. “If you learn these additional skills and

can perform these additional job functions, you will earn X more per hour,” does motivate performance.

4. Altruism. The principle of altruism is that the only justification for our existence is service to others. This principle has survived through the ages and in every great religion.

*“So, whatever you wish others would do to you, do also to them, for this is the Law and the Prophets (Matthew 7:12);*

*“One should seek for others the happiness one desires for himself” (Buddhism).*

*“Regard your neighbor’s loss as your own loss. (Taoism)*

Positive psychology confirms that the Golden Rule leads to deeper and more authentic happiness. Doing good for others is an investment returned in happiness. Connect your organization’s mission to doing good for others. Provide direct line-of sight from the vision, mission and strategy to the operational plan so shop floor teams and ultimately every individual contributor can see how they make a difference. People need to know that they are part of a greater purpose.

5. Optimism. Create in your mind a mental picture of yourself succeeding. Hold this picture tenaciously and your mind will seek to develop the picture. High performing individuals are optimistic. Optimists tend to believe that setbacks are temporary and perceive it as a challenge to try harder. Create a culture of optimism, of belief in a positive future for your organization.



6. Creative dissatisfaction. Creative dissatisfaction is the awareness of the gap between where I am or who I am and where I could be or who I could be which motivates high performance. Answering the questions “Where are we going?” “Why will it be great?” and “How will we get there?” will help to generate creative dissatisfaction in an organization.

Bottom-line, to instill joy and generate high performance in your organization,

- build winning teams;
- build internal social networks;
- Demonstrate respect for people and their strengths;
- Cross-train employees to optimize the effectiveness of their teams;
- Pay employees for gaining skills and achieving new performance levels;
- Clarify and promote the worthy purpose of your organization;
- Hire optimists;
- Generate creative dissatisfaction.

Easy, right? No, for many happiness is too abstract to invest time and resources in achieving. How do you know when it is time to make the investment? When you see signs of the following 3 consequences of an unhappy workplace:

#### 1. High Turnover

According to a 2017 Gallup State of the American Workplace report, 51% of currently employed adults say they are searching for new jobs or watching for new job opportunities – half your team, including your star performers. Employees are increasingly aware of their options. The internet and on-line job boards make it easy to watch for new opportunities, making it all the more challenging to retain good employees.

A turnover rate of 10% is considered normal and healthy. If higher, the organization should conduct exit interviews to learn why people are leaving.

#### 2. Burnout

Employees appear more somber or angry than excited, are increasingly tardy or take longer breaks, do not participate in meetings or take more sick days.

#### 3. Lower productivity, performance or sales than projections

Employees do not have knowledge of their performance, feel disconnected from one another or feel they have no control over their performance.

#### References:

- <http://clustermapping.us/about>
- Achor, Shawn. *The Happiness Advantage: The Seven Principles that Fuels Success and Performance at Work*. New York, NE: Crown Publishing, 2010.
- Bohan, Rick. "You Might Have the Wrong Idea About Employee Morale," *Industry Week*, July 26, 2018.
- Brassard, Michael. *The Memory Jogger Plus + Featuring the Seven Management and Planning Tools*. Methuen, MS: Goal/QPC, 1989.
- Delivering Happiness.com. "4 Signs You Should Invest in Employee Happiness," White Paper, accessed August 9, 2018
- Field, Karen. "Do Your Employees Know They are Part of Something Bigger?" *Industry Week*, Sept 29, 2017.

- Hsiehs, Tony. *Delivering Happiness: A Path to Profits, Passion and Purpose*. New York, NY: Grand Central Publishing, 2013.
- Porter Michael. "Clusters and the New Economics of Competition." *Harvard Business Review*, Vol 76, Issue 6 (Nov/Dec 1998), pp 77.
- Porter, Michael. "Location, Competition, and Economic Development: Local Clusters in a Global Economy." *Economic Development Quarterly*, Vol 14, No. 1, pp 15-34.
- Porter, Michael E. and Mark R. Kramer. "Creating Shared Value." *Harvard Business Review*, January 2011.
- Miller, Lawrence M., "Dr. Deming's Joy at Work, Happiness & the High-Performance Organization," *Industry Week*, March 26, 2013.
- Moore, Carol. "Corporate Social Responsibility and Creating Shared Value: What's the Difference?" *Heifer International*, May 14, 2014.
- Nguyen, Briana. "The Easiest, No Cost Activity Used to Build Team Connectedness," *blog.deliveringhappiness.com*, December 5, 2018.
- [themanufacturinginstitute.org/research/facts](http://themanufacturinginstitute.org/research/facts). "Manufacturing Makes a Positive Contribution to Most State Economies." October, 2013.
- Wikipedia. "Business Cluster." Accessed July 6, 2018.
- Wikipedia, "Interpersonal Relationships." Downloaded November 8, 2017.





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