

THE INTEGRATED COMPONENTS OF OPTIMUM PERFORMANCE

Clearly, in today’s highly competitive economy, past success means nothing. Desire, without disciplined and appropriate action, also means nothing. However, it is just as clear that implementing a disciplined approach to performance excellence based on the Baldrige Criteria produces winning levels of performance. The key to the success of the Baldrige Criteria has been the identification of the key drivers of high performance. The Baldrige Performance Excellence Program within NIST ensures that *each element of the Baldrige Criteria is necessary, and that together they are sufficient to achieve the highest levels of performance.* Many management practices of the past have proven to be necessary ingredients of high performance, such as Six Sigma techniques. However, taken piecemeal, these practices by themselves have not been sufficient to achieve optimum performance.

Achieving top levels of performance requires that each component of the organization’s management system be integrated and optimized. In many ways, optimizing the performance of an organization’s management system is like making an award-winning cake. Too much or too little of any key ingredient sub-optimizes the system. For example, a cake may require eggs, flour, sugar, butter, and cocoa. A cake also requires a specific level of heat for a certain time to bake properly. Too little or too much of any ingredient, including oven temperature, and the system (in this case the cake) fails to achieve desired results. One could argue that to be successful, the cake must contain all of the necessary elements (ingredients) and those elements must be complete and properly assembled (sufficient work processes) to achieve the desired

taste (level of excellence). Optimum Outcomes = Necessary and Sufficient.

The same principle applies in an organization. A successful organization requires a strong customer focus, engaged workers, efficient work processes, fact-based decision making, clear direction, and continuous improvement and innovation. Organizations that do not focus on all of these elements find that their performance suffers. Focusing on only a few of the required ingredients, such as reengineering to improve work processes or training to improve worker skills, may be necessary but not sufficient to drive high levels of performance.

The following figures depict the elements that are both necessary and sufficient to achieve high levels of performance in any organization or part of an organization—an Integrated Management System. The elements apply to any managed enterprise, regardless of size, sector, product, or service.

Get Results, Produce Value. (Figure 5) In the first place, for organizations, teams, or individuals to stay in business (or keep a job) for any length of time, they must produce desired results. The work results must be valued. History has demonstrated that people, organizations, or even governments that failed to deliver value eventually went away or were overturned. Value can be measured in a variety of ways, including fitness for use, return on assets, profitability, reliability, and durability, to name a few.

Engaged Customers. (Figure 6) Understand and meet their requirements—engage them as advocates. We have learned that it makes no difference if the producer of the goods or services believes they are valuable if the customer or user of the goods or services believes they are not. The customer is the best entity

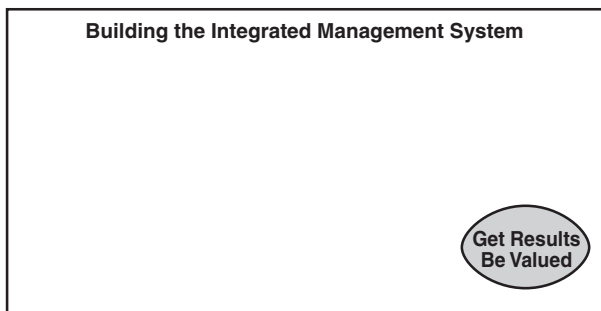


Figure 5 Get results, produce value.

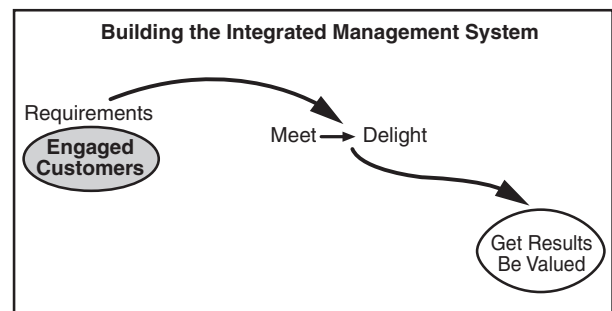


Figure 6 Customer requirements.

to legitimately judge the value of the goods or services that suppliers produce. It is the customers who finally decide whether the organization, team, or government organization continues to stay in business.

Imagine that you go to a restaurant, order seafood, and find that it tastes awful. Upon complaining about the bad-tasting meal, you are not impressed with the chef’s claim that “only the finest ingredients were used.” It also does not help if the chef claims that he likes the taste of the fish. It still tastes bad to you. At this juncture the restaurant has an opportunity to recover customer confidence and build loyalty to better engage the customer. Unless the chef is willing to make an adjustment, you are not going to be satisfied and are unlikely to return. If enough customers find the food or service offensive and do not return, the restaurant goes out of business. On the other hand, by properly managing the complaint and taking steps to promptly resolve the problem *to the satisfaction of the customer*, the restaurant can not only recover but enhance loyalty and better engage its customers so they become active supporters.

Accordingly, it is very important for the organization to obtain feedback from the customers after they have had an opportunity to experience its products or services. The failure to understand the requirements of the customers may cause the organization to deliver the wrong thing, creating customer dissatisfaction, delay, or lower value. Every time our organizations fail to meet customer requirements, value suffers. To consistently produce value, organizations must accurately determine the requirements of their customers and consistently meet those requirements and, if possible, exceed expectations. This creates the initial value chain that provides the competitive advantage for any organization or part of an organization.

To ensure that the customer is satisfied and likely to return (or recommend a service or product to others), it is important to determine if the customer received appropriate value. If the customer is dissatisfied, you have an opportunity to correct the problem and still maintain customer loyalty. In any case, it is important to remember that it is the customer and not the marketing, engineering, or manufacturing departments or the service provider that ultimately judges value received and determines satisfaction.

Engaged Workers. (Figure 7) Engaged workers are key to the next part of the Integrated Management System to ensure optimum performance and value. In any organization or part of an organization, people do the work that produces customer value. As described previously, if the work is not focused on customer requirements, customers may be dissatisfied. To satisfy customers, work may have to be redone, adding cost and suboptimizing value. In order to optimize output and value, people doing the work must have the willingness and desire to work. The best workers contribute their *utmost* for the success of the organization and its customers. Disgruntled, disaffected, unwilling workers hurt productivity.

However, *motivated workers* means more than simply possessing the willingness to work. Workers must also possess the knowledge and skills to carry out their jobs effectively. The pace of change is accelerating, and with it, knowledge demands are increasing. As new knowledge is created at an accelerating rate, it is more critical than ever to have effective training systems in place to ensure workers stay current and can effectively apply the new knowledge.

In addition, to optimize output, people must be free from bureaucratic barriers and arbitrary restrictions that inhibit work. Every minute that work is delayed while waiting for an unnecessary approval adds cost but not value. Every minute that work has to be redone because of sloppy performance of a coworker adds cost but not value. Every minute that work has to be redone because of inadequate knowledge or ability adds cost but not value.

Remember that one person cannot produce optimum levels of performance. However, one person can prevent optimum levels of performance, and may not

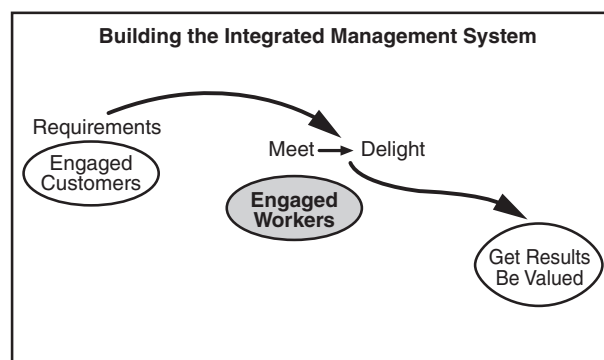


Figure 7 Engaged, motivated people.

be aware that he or she is doing so. The question that should concern management is, “In your organization, how many people are disgruntled, discouraged, underskilled, or prevented from working effectively so that they suboptimize the organization’s performance?”

Efficient Processes. (Figure 8) Even the most highly skilled, knowledgeable, and willing workers will fail to optimize value if asked to do stupid things. Over time, even the most efficient processes can become suboptimal and inefficient. Business process Lean Enterprise and Six Sigma improvement techniques have been seen by some as panaceas for organizational optimization. Certainly these tools allow organizations to redesign and quickly eliminate much of the bureaucratic silliness and inefficiency that grow up over time. However, how long does it take for the newly reengineered process to lose efficiency relative to newer, more innovative approaches? Even new processes must be evaluated periodically and improved or they eventually become suboptimal and obsolete. **Ensuring that processes are optimal requires ongoing, fact-based evaluation and meaningful improvement.**

Every process in the organization has the potential for increasing or decreasing the value provided to customers. Obviously, key work processes are perhaps the most important. However, the core processes of an organization frequently are disrupted because of failed support processes or supplier failure. For example, production can come to a halt if key components from the procurement office are not available on time. Production can also be disrupted if key workers who were supposed to be provided by

the personnel office are not available. Performance suffers if the transportation provider is always late.

As previously discussed, failures must be addressed promptly to satisfy customers. Fixing a problem constitutes rework. Any time an organization engages in rework, value for the customer is sub-optimized. To make matters worse, if the need to engage in rework is not discovered until the product or service is complete, the cost of correction is higher, driving value lower. It is important, therefore, to uncover potential problems as early as possible, rather than wait for the end result to determine if the product or service is satisfactory. To uncover potential problems early we must be able to predict the outcomes of our work processes. This requires *in-process* measures. Through the use of these measures, organizations can determine if the product or service is likely to meet expectations. Consider the two examples that follow:

- Example one: A customer comes to the *Wait-And-See* coffee shop and orders a cup of coffee. The coffee is poured and delivered to the customer. The customer promptly takes a sip and informs the server that the coffee is too cold, too bitter, too weak, and has a harsh aroma. Furthermore, the customer complains that it took too long for the coffee to be served. The server, in an effort to satisfy the customer, discards the original coffee, brews a fresh pot, and delivers a new cup of coffee to the customer at no additional charge. This problem happens frequently. As a result, the *Wait-And-See* coffee shop has been forced to raise the price of coffee in order to stay in business and has noticed that fewer customers are willing to pay the higher price. Many customers have stopped coming to this coffee shop entirely. The customers that continue to buy coffee from this shop are subsidizing the sloppy performance and poor quality.
- Example two: To increase the likelihood that its customers will like the coffee it serves, the *In-Process-Measure* coffee shop has asked its customers key questions about the quality of coffee and service that they expect. The *In-Process-Measure* coffee shop has determined through testing and surveys that its customers like coffee

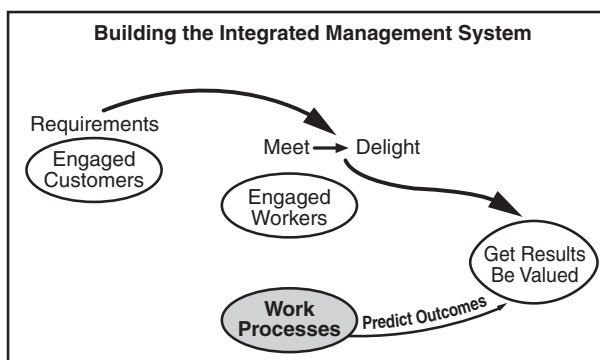


Figure 8 Efficient, effective processes.

served hot (between 76° and 82° Celsius); not too bitter or acidic (pH > 7.4); strong, but not too strong (75 grams of super-fine grind per liter of filtered water); and fresh (served within five minutes of brewing). By checking these measures, this coffee shop can predict that nearly all customers will be satisfied with the quality and service it delivers. Since the *In-Process-Measure* coffee shop can consistently deliver coffee within these customer-defined specifications, its customers like the coffee. No rework is required, no coffee is discarded, the price is lower, the value is higher, the store is profitable, and it is taking customers from the *Wait-And-See* coffee shop down the street.

Data and Dashboard to Monitor Progress. (Figure 9) Data and information help the organization and its workers make better decisions about their work. This enables them to spot problems more quickly and take prompt actions to improve performance and correct or minimize non-value-added costs. Without appropriate measures, organizations and their workers must rely on intuition to determine whether customers are likely to be satisfied and willing to return.

One of the problems in basing decisions on intuition or best guesses is that it produces highly variable decisions. The guess of one worker is not likely to be consistent with the guess of another. Appropriate data, therefore, are critical to increase decision-making consistency and accuracy. For data to be used correctly to support decision making, organizations must develop a system to manage, collect, analyze, and display the results.

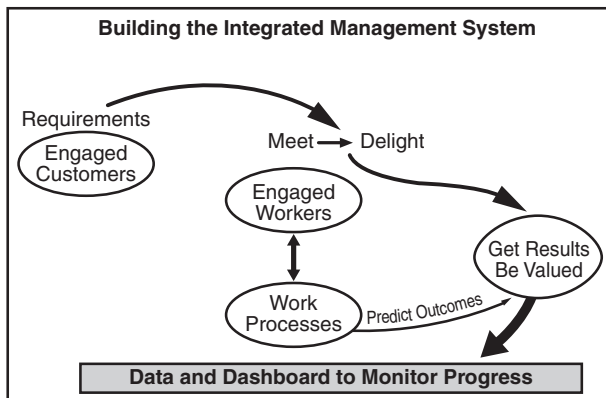


Figure 9 Information and data dashboard.

If the data that drive decision making are not accurate or reliable, effective decision making suffers. More mistakes are made, costs increase, and value is suboptimized again. Furthermore, in the absence of relevant data and supporting analyses, leaders are generally unwilling to allow subordinates to substitute their intuition for that of the leader. As a result, decisions tend to get pulled to higher and higher levels in an organization, further suboptimizing the contribution of workers who are generally closest to and know the most about the work they do. Failure to fully utilize the talents of workers, as discussed previously, further reduces efficiency and morale, hurts engagement, and suboptimizes value production.

The system described in Figure 9, which includes engaged customers, engaged workers, efficient processes, and a dashboard to monitor progress leading to desired results and value, applies to any managed enterprise. It applies to whole corporations as well as departments, divisions, teams, and individual work.

The system applies to schools, classrooms, government agencies, and health care organizations. In each case, to produce optimal value, the requirements of customers must be understood and met. Workers must be motivated, possess the skill and knowledge needed to do their work, and be free from distractions in order to contribute their utmost. The organization must develop efficient work processes and monitor effectiveness of work to make adjustments in an effort to maximize value.

Leadership. (Figure 10) What makes an organization unique is the direction that top leaders set for it. Leaders must understand the requirements and

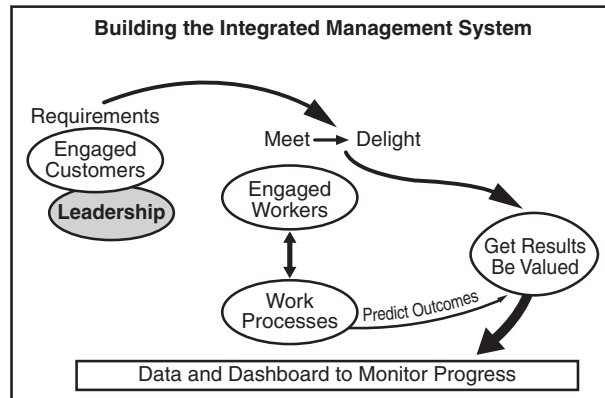


Figure 10 Leadership.

expectations of customers and the marketplace to decide what direction is necessary to achieve success. However, it is not enough simply to understand customer requirements and expectations. Leaders must also understand organizational capabilities and the capacity and capabilities of the workforce, partners, and suppliers of critical goods and services.

Leaders should be the driving force for organizational excellence, and for leading the transformation that may be required to change the culture and the structure of the organization. They should serve as role models of excellence, communicate effectively, and instill a spirit for innovation and continuous improvement throughout the organization.

Strategy. (Figure 11) Effective leaders use the process of strategy development to determine the most appropriate direction for the organization and identify the levels of performance in key areas that

are critical for success (goals and objectives). Strategic objectives must define, in outcome-oriented terms, what the organization must actually achieve to be successful in the future. Once strategic direction and strategic objectives are defined, leaders identify the people and the processes that must be in place to produce desired results and be valued by customers. Leaders must then communicate with the workforce, suppliers, partners, and customers to make certain everyone understands and supports the desired direction and actions.

If leaders are not clear about the strategy and actions that must be taken to be successful, they force subordinates to substitute their own ideas about the proper direction and actions. This creates inefficiency within an organization. People come to work and want to be successful. Without direction from the top, they will still work hard but often at cross-purposes. Unless everyone is pulling in the same direction, processes, products, and services will not be optimized and value to customers will be reduced.

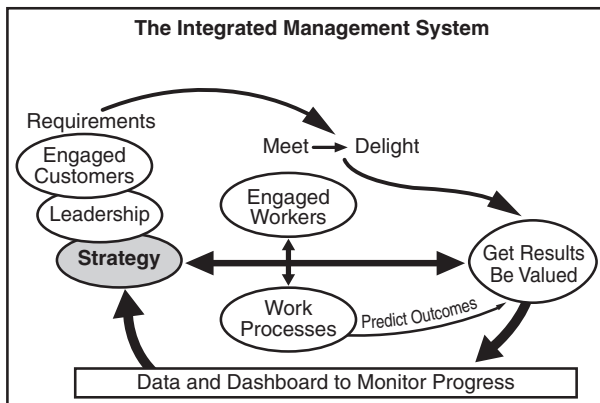


Figure 11 Strategy development and execution.

The Importance of the Integrated Management System. An effective and powerful Integrated Management System is holistic. We cannot eliminate a single part of this management system and still expect to produce optimum value. Each part is *necessary*. Furthermore, studies repeatedly demonstrate that when these processes are integrated and used to manage work, they are *sufficient* to achieve high levels of performance. Imagine what might happen if one or more of the pieces of the Integrated Management System described previously were missing. Table 1 on the next page provides some suggestions.