CHAPTER 2 ENERGIZED OPERATIONS

Measurement, Analysis, and Knowledge Management: The data created and maintained by GIS, CIS, AMI, SCADA and other systems create a wealth of information that can be analyzed to obtain knowledge sufficient to make rapid business decisions. However, many of these systems are incapable of or at the very least difficult to integrate with one another, leaving leaders with a lot of data but no meaningful measures of key performance. Even worse, a lack of standards related to system performance leaves many utilities that develop performance measures with a limited number of inconsistently measured comparatives from their peers. If utilities are going to overcome the challenges of the future, it is essential that they integrate all systems for improved accessibility and develop standards that would facilitate meaningful comparative measures. This is not to say that comparative measures do not exist, they do. However, increasing the number of utilities participating would increase our understanding of best practices and enable us to determine best-in-class performance.

The measurement, analysis, and knowledge management category examines how your organization engages, manages and develops the workforce to utilize its full potential in alignment with organizational mission, strategy and action plans. The category examines the ability to assess workforce capability and capacity needs and to build workforce environment conducive to high performance (2).

Process Management: It is not unusual for utilities to implement new software with dramatically increased capabilities and ask the integrator to make it align with their current processes or continue to use their current processes without regard for the system’s new capabilities. Identifying and mapping key work processes can enable incredible opportunities for streamlining your organization and facilitates increased utilization of technology. What are your utilities key work processes and how do you determine them and their relationship to creating customer value? These are difficult for leaders to articulate; but yet, without a clear understanding of key work processes and their alignment to core competencies and strategic advantages as well as challenges, it may be that your organization is misapplying efforts related to core competencies and either outsourcing something best maintained internally or performing effort that is better delivered by outsourcing providers.

The process management category examines how your organization designs its work systems and how it designs, manages and improves its key processes for implementing these work systems to deliver customer value and achieve organizational success and sustainability. Also examine Is your readiness for emergency (2).

Results: Results are the fruit of your efforts, the gift that the Baldrige Criteria enables you to receive from your applied efforts. All of us want positive results. Many utilities cite positive performance in measures that are easy to acquire: financial performance, safety performance, customer satisfaction. But which of these measures are key to our success and sustainability as an organization? As you answer the questions and align measures that are integral to obtaining your organization’s mission and vision, it will become abundantly clear which measures you will need to maintain and develop competitive comparisons and benchmarks.

The results category examines the organization a performance and improvement in all key areas: product outcomes, customer-focused outcomes, financial and market outcomes, workforce-focused outcomes, process effectiveness outcomes and leadership outcomes. Performance levels are examined relative to those of competitors and other organizations with similar product offerings (2).

A CHALLENGE

The adoption of the Baldrige criteria is often described as a journey. Few utilities have embraced this model. However, it appears to offer a comprehensive solution to the challenges we face today. Utilities have a rich history and play a positive role in our nation. A period of rapid change is upon us. We need to shift from reacting to leading as we solve the problems that face our industry. By applying this model for effective process improvement, we can once again create a world where utilities lead the future.

REFERENCES

1. Quote from U.S. Treasury Secretary Tim Geithner as communicated in SmartGrid Newsletter

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More information and additional material can be found online at: www.utilitiesproject.com
CHAPTER 2
ENERGIZED OPERATIONS

Business Process Improvement

How the Baldrige Criteria for Performance Excellence can help today’s utility industry meet tomorrow’s challenges.

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The consumer’s concept of quality will no longer be measured by only the physical attributes of the product. It will extend to the process of how the product is made, including product safety, environmental compliance and social responsibility.

—Victor Fang, chairman of Li and Fang, in the 2008 IBM CEO Study

In the past, the utility industry could consider itself exempt from market drivers like those listed above. However, today’s utilities are immersed in a sea of change. Customers demand reliable power in unlimited supply, generated in environmentally friendly ways without increased cost. All the while regulators are telling consumers to change the way they are using energy or be ready to pay more. And the Department of Energy is calling for utilities to make significant reductions in usage by 2020 [1].

The criteria are essentially simple, yet the utility industry has been slow to respond to this new environment. Customers demand increased cost. All the while regulators are bringing with them increased levels of accountability, a greater focus on regulatory, legal and ethical requirements, a need for long-term viability and sustainability, and increased expectations of community support. Today’s leaders are expected to achieve ever-increasing levels of operational performance while operating on less margin than ever before.

The leadership category examines how senior leaders, personal actions and knowledge management establish the foundation. There are two triads. On the left hand side, leadership, strategic planning and customer focus make up the leadership triad.

In this model, measurement, analysis and knowledge management establish the framework. There are two triads. On the right hand side of the model, workforce focus, process management and results make up the results triad. The alignment and integration of these essential elements of business create a framework for continuous improvement. This model should appear familiar in concept to industry leaders; there is not a single utility in the industry that does not identify with these categories in some form.

The criteria are built to elicit a response through the use of how and what questions that ask about key processes and their deployment throughout the organization. On face value, these questions appear to be simple. However, as you respond to them, you will realize their linkage and begin to identify opportunities for improvement that are essential to future success. Leaders wishing to begin this effort should not be surprised by the depth of the questions and the relatively few answers you can receive from organizations far beyond your horizon. Many of them are the traditional competitor.

Strategic Planning: Does your utility have a strategic plan? Not a dust-laden document sitting on a bookshelf or a financial budget; but a plan that identifies strategic objectives and action plans to address short and long-term goals. Our current business environment demands that we identify our core competencies (and more importantly what are not our core competencies), identify strategic challenges to organizational success, recognize strategic advantages and develop plans that ensure our efforts are focused on objectives that will ensure achievement of our mission and vision. What elements of our business should we outsource? Do our objectives utilize

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Shaping a New Era in Energy

Leadership: Who could argue that the current demand for leadership in utilities is more critical today than ever before in our history? Changes in energy markets are bringing with them increased levels of accountability, a greater focus on regulatory, legal and ethical requirements, a need for long-term viability and sustainability, and increased expectations of community support. Today’s leaders are expected to achieve ever-increasing levels of operational performance while operating on less margin than ever before.

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In the past, the utility industry could consider itself exempt from market changes like those listed above. However, today’s utilities are immersed in a sea of change. Customers demand reliable power in unlimited supply, generated in environmentally friendly ways without increased cost. All the while regulators are telling consumers to change the way they are using energy or be ready to pay more, and the Department of Energy is calling for utilities to make significant reductions in usage. If these issues are not enough, couple them with a loss of knowledge and skill due to an aging workforce, an ever-increasing amount of automation and technology being introduced into our infrastructure with few standards, tightening bond markets and economic declines requiring us to do more with less. Now more than ever the industry needs to redefine our core competencies, identify key customers and their requirements, and define processes that meet or exceed their expectations. Business process improvement is essential to ensure future success for utilities. There is no need to reinvent the wheel and develop a model for utilities to address business process improvement today. One already exists that offers the most holistic approach to process improvement today. This model, measurement, analysis and knowledge management, establishes the foundation. There are two triads. On the left hand side, leadership, strategic planning and customer focus make up the leadership triad. On the right hand side of the model, workforce focus, process management and results make up the results triad. The alignment and integration of these essential elements of business create a framework for continuous improvement. This model should appear familiar in concept to industry leaders; there is not a single utility in the industry that does not identify these categories in some form.

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In assessment of the model’s ability to meet utility industry needs, let’s discuss each category in greater detail, provide relevance to the utility industry and include key questions for you to consider as you begin to assess your own organization’s performance.

Leadership: Who could argue that the current demand for leadership in utilities is more critical today than ever before in our history? Changes in energy markets are bringing with them increased levels of accountability, a greater focus on regulatory, legal and ethical requirements, a need for long-term viability and sustainability, and increased expectations of community support. Today’s leaders are expected to achieve ever increasing levels of operational performance while operating on less margin than ever before.

The leadership category examines how senior leaders personal actions guide and sustain the organization. Also examined are the organization’s governance system and how it fulfills legal, ethical and societal responsibilities as well as how it selects and supports key communities.

Strategic Planning: Does your utility have a strategic plan? Not a dust-laden document sitting on a bookshelf or a financial budget, but a plan that identifies strategic objectives and action plans to address short and long-term goals. Our current business environment demands that we identify our core competencies (and more importantly what are not our core competencies), identify strategic challenges to organizational success, recognize strategic advantages and develop plans that ensure our efforts are focused on objectives that will ensure achievement of our mission and vision. What are the functions of change in our organization to respond to the challenges as they arise?

The strategic planning category examines how your organization develops strategic objectives and action plans. Also examined are your chosen actions that address business process improvement. The Criteria for Performance Excellence is designed for times such as these in which the utility industry is facing significant challenges to organizational success, requiring us to do more with less.

Customer Focus: The success of the utility industry has been due in part to a long-term positive relationship with its customers. Most utilities have made a conscious effort to identify and address the needs of the customer; however, a new breed of customer is emerging with greater expectations, a higher degree of sensitivity to environmental issues, a diminished sense of loyalty to business organizations and overall suspicion of ethical and legal compliance. Their preferred means of communication are quite different than the generations of loyal customers you have enjoyed in the past. They judge your performance against similar customer experiences received from organizations far beyond the traditional competitor. How do you respond? Who could argue that the Baldrige Criteria are not relevant to your organization?

Customer values, key questions for you to consider as you begin to assess your own organization’s performance.

Operational Profile: Environment, Relationships, and Challenges

Leadership

Customer Focus

Strategic Planning

Workforce Focus

Process Management

Measurement, Analysis, and Knowledge Management

Customer - defined value

Continuous process improvement

Map and understand value stream

Make value streams flow

FIGURE 1 The DMADV (Six Sigma Model) and Lean Model.

FIGURE 2 The framework includes seven components.

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The measurement, analysis and knowledge management category examines how the organization selects, gathers, analyzes, manages and improves its information and knowledge assets and analyzes how it manages and improves its data, information and knowledge assets and how it manages its information technology. The category also examines how your organization designs processes that develop performance measures in support of the organization’s mission and vision, it will become abundantly clear which measures you’ll need to maintain and develop competitive comparisons and benchmarks.

The results category examines the organization’s performance and improvement in all key areas product outcomes, customer-focused outcomes, financial and market outcomes, workforce-focused outcomes, process effectiveness outcomes and leadership outcomes. Performance levels are examined relative to those of competitors and other organizations with similar product offerings.

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REFERENCES

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