# An Analytical Review of the Malcolm Baldrige National Quality Award

LaWayne Smith, Jeffrey M. Ulmer University of Central Missouri Warrensburg, MO, USA Ixs89990@ucmo.edu, julmer@ucmo.edu

Abstract— The intent of this manuscript was to look through the perspective of the business, when assembling a team of experts, in preparation to submit for the Baldrige Award. The "voice of the process" is shared through several quotations from quality and industry experts to help readers get into the mind of Baldrige Award Practitioners. The manuscript incorporates some of the criteria used by an award evaluator when inspecting a business using the Malcolm Baldrige National Quality Award criteria. The discussion is on the seven key categories: leadership; strategy; customers; measurement, analysis, and knowledge management; workforce; operations; and finally, results. Baldrige is a holistic and comprehensive approach to quality and quality management.

Keywords— Quality Management, Malcolm Baldrige National Quality Award

#### I. MALCOLM BALDRIGE NATIONAL QUALITY AWARD

"Building an effective management system capable of driving performance improvement is an ongoing challenge because of the intricate web of complex relationships among management, workers, customers, stakeholders, partners, and supplier. The best organizations have put in place a truly integrated management system that improves its work processes continually. They measure every key facet of business activity and closely monitor organizational performance. Leaders of these organizations set high expectations, value workers and their input. communicate clear directions, and align the work of everyone to optimize performance and achieve organizational goals" [1]. A quality system which satisfies performance improvement measures is the Malcolm Baldrige National Quality Award (MBNQA).

Coming off the heels of World War II, and into the 1980's, the Japanese owned the marketplace because their business leaders strove to meet the quality requirements of the Deming Prize criteria. The Deming Prize used the teachings of Dr. W. Edwards Deming, who encouraged leaders to continuously seek quality improvement. "By the mid-1980's, Japan was an economic powerhouse, and sluggish U.S. companies were under pressure to seek performance excellence and innovation or risk losing further ground...it was clearly seen as emanating from outstanding management systems" [2]. This prize served as a method for the formation of a U.S. quality award; the Malcolm Baldrige National Quality Award. The award, created by the United States Congress in 1987, has one goal in mind: assist businesses in the U.S. compete in the global market. Baldrige allows businesses to focus on improving systems and

processes to compete in the global market, just as Japan had done post war, by using baselines and benchmarking measurements. A perspective of the Baldrige system allows the organization to achieve its mission through consistent processes, actions, and measurements are unified and working together.

The MBNQA uses, and updates annually, seven categories to measure organizational kev performance: leadership: strategy; customers: measurement, analysis, and knowledge management; workforce; operations; and finally, results. When being assessed, each of these key categories are given a score, based upon the level of requirements approached by an organization, and then totaled at the end for a composite score. The categories, in a way, are joined together like an activity of connect the dots. As each dot is connected, the picture becomes clearer in revealing each category and how it measures within an organization. To manage the dots, a council of knowledgeable members, who understands each category of the Baldrige criteria, should be created by senior leadership. This council is instrumental in the development of the continuous improvement plans, communication webs, and role definitions; therefore, each member is an expert in one of their given categories.

II. LEADERSHIP

The leadership category looks at the senior leader's "...commitment to and involvement in process improvement. Company leaders are expected to develop and sustain a customer focus supported by visible actions and values on their part. This section also examines how the organization addresses its responsibilities to the public and exhibits good citizenship. This section also addresses the role of senior leadership and an organization's governance and how it handles social responsibilities like conservation of natural resources, community support, and other public concerns" [3]. Leaders play a huge role for either the success or failure of any organization. Therefore, under the Baldrige criteria, leadership is the first key requirement in measurement. The council expert in this category looks at the effectiveness of leadership and it aligns in both the strategic and operational activities of the organization. This is done through communicating and reinforcing performance expectations, engaging customers, and enhancing leadership skills. Other responsibilities include an evaluation system for senior leadership, effective management, and leadership accountability. "Successful leaders use ongoing and carefully

designed communication and their personal leadership actions to communicate and reinforce the organization's direction—it's mission, vision, and values and, in particular, its patient-focused goals...the workforce understands the vision and the goals, then position Baldrige as the method to track the progress" [4]. Successful leadership mandates organizational performance through ethical behavior and a risk-taking environment. This atmosphere of performance leads us to the next category of strategy.

III. STRATEGY

In the strategy category, "...a company needs to have sound strategy development and strategy implementation process in place. Strategic thinking supports organizational excellence. Key aspects to this section include customer-focused excellence, operational performance improvement and innovation, and organizational learning and learning by workforce members. Leaders are expected to consider strategic opportunities, challenges, and risks while they optimize the use of resources including a skilled workforce" [3]. Many organizations are good at planning but fail to execute the plan; this category is all about executing the plan. Strategic champions work to increase the actions of putting the plan, both the short-term and long-term, into motion by establishing goals and measurables to increase organizational effectiveness. This is completed by ensuring that all employees have the required resources and understand their role in the organization by an outcome orientation process being in place. Both the strategy and leadership expert work together in promoting an environment for innovation and to ensure that systematic processes are in place to understand the work systems. Strategy may be created by thinking of new products, redefining markets, or as simple as meeting a community or public need. These action plans often lead to a redesign of the capability of the workforce, either by offering new education and training opportunities, or by simply empowering the workforce. For effective strategy, each person within the organization should understand, through effective communication, how their work contributes to the overall mission success. The book, Insights to Performance Excellence, summarizes that during the assessment process, evaluators will generally look on how well strategy is developed in the planning process: key process steps; key participants; short and long-term planning horizons; planning for transformational change and priority of these changes; and operational flexibility. Assessors will also attempt to extract how well the organization is collecting and analyzing relevant data to develop the information needed for the strategic plan: strategic challenges and advantages; changes in regulatory and external business environments, blind spots in the planning process; and the ability to execute the strategic plan [1]. It is ultimately the senior leader's responsibility to create the organizational vision of strategy for continued success. Once the leadership and strategy is assessed, the customer category is then evaluated.

#### A. Customers

"The third category of the Baldrige Award criteria deals with the company's relationship with its customers. How well does the organization listen to the voice of the customer? This category focuses on a company's knowledge of customer requirements, expectations, and preferences as well as marketplace competitiveness. In other words, does the organization capture actionable information from the customer? The criteria also sought to determine if the company has put this knowledge to work in the improvement of their products, processes, systems, and services. Success in this category leads to improved customer engagement through customer acquisition, satisfaction, and retention. This category clarifies a company's commitment to its customers" [3]. The expert in this category looks to enhance customer relations and engagement by ensuring systems, such as internet or telephone, are in place to guickly resolve complaints. It's important to note that not all customers are the same, so multiple modes of to gather customer feedback is imperative. According to Blazey and Grizzell [1], "the voice of the customer refers to your process for capturing customer-related Voice-of-the-customer processes are information. intended to be proactive and continuously innovative to capture stated, unstated, and anticipated customer requirements, expectations, and desires. The goal is customer engagement". High performing organizations seek this voice of customer processes frequently to drive improvement. Customer improvements, leadership strengths, and strategy are then measured or analyzed, taking the assessor to the next category.

## *B.* Measurement, Analysis, and Knowledge Management

"The award recognizes that information is only useful when it is put to work to identify areas for improvement. This category investigates a company's use of information and performance measurement systems to encourage excellence. Performance information must be used to improve operational Competitive comparisons and competitiveness. benchmarking are encouraged to review and analyze organizational performance. Areas of interest include improvement measurement. analysis, and of knowledge organizational performance, and management information, and information technology" Experts in this area ensures that all the [3]. information is available to be collected, monitored, and analyzed to meet the strategic goals and action plans of the organization. This information helps senior leaders to set priorities and identify opportunities for continuous process improvement. Like a computer motherboard, performance analysis in this category. examines trends and cause-effect relationships. "The analysis should support your performance reviews, help determine root causes, and help set priorities for resource use...drawing on mandated measures" [1]. It is imperative to use the gained knowledge learned from analysis to make fact-based decisions; because

knowledge kept cornered in the back of the room cannot benefit the organization. One of the key components in this category is the use of benchmarking processes. Benchmarking is the collecting of information and data about your processes and comparing them with similar activities either inside or outside your organization. Measuring and analyzing the processes garnered knowledge, but now it's time to put it to work.

C. Workforce

"Reviewers for the Baldrige Award are interested in a company's plans and actions that enable its workforce to perform to the fullest potential in alignment with the company's overall strategic How does the workforce support and objectives. improve its workforce capability and capacity? Employee involvement, education, training, and recognition are considered in this category. А company's work environment receives careful scrutiny in an effort to determine how the company has built and maintains a work environment conducive to performance excellence as well as personal and organizational growth. Subcategories include workforce engagement and workforce environment" The workforce expert seeks to create a work [3]. environment that enhances the satisfaction and moral of the company's workforce. Workforce refers to the permanent, temporary, and part-time personnel who are actively engaged in accomplishing the company's mission. The workforce reflects both the diversity of the community the company resides, and in the diversity of the customer community. Leaders determine the "fit" of their workforce by establishing measurable performance standards in the knowledge and skills needed for career progression, customer relationships, and customer feedback. "A topperforming workforce is managed in such a way as to encourage workers to exercise optimum discretion, take intelligent risks, and make fact-based decisions. These behaviors typically produce higher engagement and better performance" [1]. The key to a successful workforce is to create a culture of both engagement and empowerment. Engagement is where the workforce contributes their best to the success of the organization and its customers. Empowerment is designed to provide the team with the tools and resources to make the necessary decisions that affect their work. It is common that empowerment is used as a tool to engage the workforce. An organization's workforce is the backbone in the sustainment of operations.

### D. Operations

"Within this category, the company is judged on how it designs and manages the work performed, product design and delivery, innovation, and operational effectiveness. Companies must provide details on their key business processes as they relate to customers, products, and service delivery. Topics of interest include: work processes and operational effectiveness" [3]. The Operations expert looks to see that continuous improvement activities are embedded into all the organizations processes so that product and service refinements lead to higher operational productivity; called a work system. Work systems are designed to achieve organizational success by creating value for the customer through products and services. This can be accomplished by looking at supply chains, work-safe environments, or in delivery methods in the hopes to mitigate problems. Organizations must have the flexibility to change processes to align to customer's demands and in the elimination of micro-management. Improvina performance in operations may include implementing approaches such as a Lean Enterprise System, Six Sigma methodology, International Organization for Standardization (ISO) quality system standards or other process improvement tools. These approaches, in addition to the "real appeal of the Baldrige framework is its ability to create a meaningful balance between managing our business while simultaneously improving our business. As a result, evolving improvement methodologies no longer need to be viewed as competing initiatives, but deliberate steps in our journey toward organizational excellence" [5]. All the processes used to manage operations should provide measurable results.

E. Results

"Ultimately, the purpose of being in business is to This category examines a stav in business. company's performance and improvement in several key business areas including customer satisfaction, product and service performance, financial and marketplace performance, human resources, and operational performance. Benchmarking is encouraged to see how the company compares with its competitors. Areas of interest are product and process results, customer-focused results, financial and market results, workforce-focused results, and leadership and governance results" [3]. The results expert ensures that there are performance reports, provided by the other six champions, on-hand as evidence of a management system. Results champions also coordinate with the other category experts when it is found that necessary data is missing from an existing process; works to develop ways to include the induction of a new process measurement Basically, the results category presents a plan. balanced scorecard of the organization's product, service, leaderships, processes, and finally, the The scorecard should provide holistic workforce. picture into the overall organizational strategy and answering two basic questions: is the organization getting better and are they doing any good? The entire Baldrige Criteria "place great emphasis on achieving and reporting results" [1].

IV. CONCLUSION & DISCUSSION

At the end of World War II, and into the 1980's, the Japanese owned the marketplace. Japanese business leaders strove to meet the quality requirements of the Deming Prize criteria. The Deming Prize used the teachings of Dr. W. Edwards Deming, who encouraged leaders to continuously seek quality improvement. This prize served as a method for the formation of a U.S. quality award in 1987; the Malcolm Baldrige National Quality Award. The award has one goal in mind: assist businesses in the U.S. compete in the global market. Like the Deming Award, Baldrige lays the groundwork for businesses to focus on improving systems and processes to compete in the global market by using baselines and benchmarking measurements. A perspective of the Baldrige system allows the organization to achieve its mission through consistent processes, actions, and measurements are unified and working together.

"Organizations everywhere are looking for ways to effectively and efficiently meet their missions and achieve their visions. Baldrige provides a framework to improve your organization's performance and get sustainable results" [6]. The Malcolm Baldrige National Quality Award uses seven key categories to measure organizational performance: leadership; strategy; customers; measurement, analysis, and knowledge management; workforce; operations; and finally, results. Assessments using the key categories are given a score, based upon the level of requirements approached by an organization, and then totaled at the end for a composite score. The categories are joined together like an activity of connect the dots, and as each dot is connected, the picture becomes clearer in revealing each category and how it measures within an organization. Management of the dots are completed by a council of knowledgeable members, who understand each category of the Baldrige criteria, and are created by senior leadership in the organization. The council is instrumental in the development of the continuous improvement plans, communication webs, and role definitions; therefore, each member is a champion in one of their given categories.

Leaders play a huge role for either the success or failure of any organization. Therefore, under the Baldrige criteria, leadership is the first requirement in measurement. The council expert in this category looks at the effectiveness of leadership and how it aligns in both the strategic and operational activities of the organization. This is done through communicating and reinforcing performance expectations, engaging customers, and enhancing leadership skills. Other responsibilities include an evaluation system for senior leadership, effective management, and leadership accountability. Successful leadership mandates organizational performance through ethical behavior and creates a risk-free environment by encouraging employees to take risks for sustainability. "Simplistically, the success of any organization depends entirely on the leadership and the workforce! This leads to the debate as to which is the most critical. It is leadership since they have the power to set the course and to recruit, develop, and motivate the workforce" [5].

Many organizations are good at planning but fail to execute the plan; this category is all about executing the plan. Strategic champions work to increase the actions of putting the plan, both the short-term and long-term, into motion by establishing goals and measurables to increase organizational effectiveness. This is completed by ensuring that all employees have the required resources and understand their role in the organization by an outcome orientation process being in place. Both the strategy and leadership expert work together in promoting an environment for innovation and to ensure that systematic processes are in place to understand the work systems. Strategy may be created by thinking of new products, redefining markets, or as simple as meeting a community or public need. These action plans often lead to a redesign of the capability of the workforce, either by offering new education and training opportunities, or by simply empowering the workforce. For effective strategy, each person within the organization should understand, through effective communication, how their work contributes to the overall mission success.

The customer category assesses how well the organization engages its customers for both the short and long-term by listening to feedback. The expert in the Customer category looks to enhance customer relations and engagement by ensuring systems, such as internet or telephone, are in place to quickly resolve complaints. It's important to note that not all customers are the same, so multiple modes of to gather customer feedback is imperative. In the end, this category seeks to both meet and exceed customer's expectations and builds relationships.

Measurement, Analysis, and Knowledge Measurement looks at how well the organization selects, gathers, analyzes, and improves all its knowledge assets. Experts in this area ensures that all the information is available to be collected, monitored, and analyzed to meet the strategic goals and action plans of the organization. This information helps senior leaders to set priorities and identifies opportunities for continuous process improvement. Research has shown that this category is like a motherboard of a computer; all the data flows through it.

This category seeks to find the capability and capacity of the workforce by how well the organization develops the employees to align with the company's vision. The workforce expert seeks to create a work environment that enhances the satisfaction and moral of the company's workforce. Not only does the workforce need to reflect the diversity of the community the company resides, but also the diversity of the customer community. This is done through establishing measurable performance standards of the knowledge and skills needed for career progression. customer relations, and customer feedback. The workforce uses a work system to encompass all the work that is conducted for the organization to achieve its mission. These systems look at both the internal and external resources need to deliver products to customers: the operational capability of the organization.

The Operations category asks how the organization manages the entire process, from design to production, to improve customer value and ongoing success. The expert looks to see that continuous improvement activities are embedded into all the organizations processes so that product and service refinements lead to higher operational productivity. This can be accomplished by looking at supply chains, work-safe environments, and delivery methods in the hopes to mitigate problems. Organizations must have the flexibility to change processes to align to customer's demands and in the elimination of micromanagement. Although there are similarities between the operations and workforce categories, the difference is that the operations category looks at the processes and the category of workforce looks at how the employees accomplish the processes.

The results expert ensures that there are performance reports, provided by the other six champions, on-hand as evidence of a management system. Results champions also coordinate with the other category experts when it is found that necessary data is missing from an existing process; works to develop ways to include the induction of a new process measurement plan. These key categories are the building blocks of the Baldridge approach and provides a systems perspective to quality. "A systems perspective means managing all the parts of your organization as a unified whole to achieve your mission. It means ensuring that your plans, processes, measures, and actions are consistent. And it means ensuring that the individual parts of your organization's management system work together in a fully interconnected, unified, and mutually beneficial manner [7].

V. REFERENCES

[1] Blazey, M. L., & Grizzell, P. L. (2017). Insights to performance excellence, 2017-2018: Using the Baldrige framework and other integrated management systems. Milwaukee, WI: ASQ Quality Press.

[2] Schaefer, C. (2011). Baldrige 20/20: An executives guide to the criteria for performance excellence. Gaithersburg, MD: Baldridge Performance Excellence Program, National Institute of Standards and Technology.

[3] Summers, D. C. (2018). Quality. NY, NY: Pearson Education.

[4] Goonan, K. J., & Staff, A. S. (2009). Journey to excellence: How Baldridge Health Care leaders succeed. ASQ Quality Press.

[5] Spong, D. (2017). The Baldrige Criteria for Performance Excellence. Baldrige Foundation: Journal of Performance Excellence, 95.

[6] Scott, L. (2017, October 13). How Baldrige Works. Retrieved July 10, 2018, from https://www.nist.gov/baldrige/how-baldrige-works

[7] Baldrige Excellence Builder. (2017-2018). Performance Excellence Program, 2.