CHRONICLE OF LEADERSHIP AND MANAGEMENT

BALDRIGE FOUNDATION INSTITUTE FOR PERFORMANCE EXCELLENCE

Volume 1, Number 1
December 2020

CONTEMPORARY CHALLENGES CONFRONTING COLLEGES AND UNIVERSITIES

The Baldrige and Excellence in Higher Education Approach to Institutional Renewal

Brent D. Ruben, Ph.D.

Dr. Brent D. Ruben is a Distinguished Professor of Communication, School of Communication and Information, Rutgers-New Brunswick, and University Director, Center for Organizational Development and Leadership.

The author gratefully acknowledges Joe Barone, Richard De Lisi, Phil Furmanski, Ralph Gigliotti, Rob Heffernan, Susan Lawrence, Laura Lawson, Barbara Lee, Gwen Mahon, Karen Novick, Bishr Omary, Jonathan Potter, Brian Strom, and Al Tallia for their helpful comments and suggestions regarding the EHE-R framework presented in this article, and Karen Verde and Jann Ruben for their much-appreciated editorial assistance.

The purpose of this article is to explore ways in which the core concepts of the Malcolm Baldrige Excellence Framework can be a useful guide to U.S. higher education institutions as they confront disruptive challenges to their core purposes, operational practices, and long-term stability in the wake of the existential crisis brought about by the COVID-19 pandemic.

Of the various methods that can be beneficial for organizational review, planning, and improvement, arguably none has been more influential than the Baldrige model. Developed by the National Institute of Standards and Technology in 1987, and named after Secretary of Commerce Malcolm Baldrige, the *Baldrige Excellence Framework* was created to respond to challenges to leadership and organizational performance (DeCarlo and Sterett, 1989; Baldrige Performance Excellence Program, 2020; Baldrige Foundation, 2020; Reimann, 1992). The Baldrige approach was originally developed for the business community and later modified for health care and education (Malcolm Baldrige National Quality Program, 2020). The framework blends scholarly concepts of organizational theory and behavior, principles from the professional literature, and successful organizational and leadership practices. The program accomplishes the following:

(a) Identifies the essential components of organizational excellence

(b) Recognizes organizations that demonstrate best practices

(c) Promotes information-sharing by exemplary organizations

(d) Encourages the adoption of effective organizational principles and practices (Baldrige Performance Excellence Program, 2020).

In 2009, the number of Baldrige web hits/downloads totaled 2.2 million annually (NIST, 2019). During the year in which the Baldrige celebrated its 25th anniversary in 2013, the number of state and local Baldrige-based award applications reached 15,000 (NIST, 2019). By 2014, 10,000 national Baldrige Examiners™ had been trained (NIST, 2019), and as of 2017, 25,000 individuals had attended Annual Baldrige Quest Conferences. (NIST, 2019). The year 2019 marked the selection of the 121st organization to be recognized as an exemplary organization by the Baldrige Program (NIST, 2020a).

Numerous case studies, professional endorsements, and leader testimonials speak to the benefits of the Baldrige model in advancing organizational insight, learning, and practice (Foundation of the American College of Healthcare Executives, 2015; Goonan, 2015; Leist et al., 2004; NACUBO, 2011; Sorensen et al., 2005; Weeks et al., 2000). Many studies provide additional evidence of the value of the Baldrige criteria for improving organizational effectiveness and performance. Organizations rated highly in terms of the Baldrige criteria have been shown to outperform other organizations financially and also report improved work processes, operational performance and reliability along with increases in employee engagement and job satisfaction, customer and patient satisfaction, customer retention, broadened market share, and a heightened understanding of the linkages among organizational components and functions. Studies of organizations adopting the Baldrige approach also point to reductions in costs, turnover, and customer complaints (Abdulla et al., 2006; Badri et al., 2006; Evans and Jack, 2018; Flynn and Saladin, 2001; NIST, 2016; Peng & Prybutok, 2015; Ruben et al., 2007; Schulingkamp & Lathan, 2015; Shook and Chenoweth, 2012; Sternick, 2011).

The Excellence in Higher Education (EHE) Framework

The original *Baldrige Excellence Framework* provided the foundation for adaptations developed for use in health care and education (NIST, 2019). The *Baldrige Excellence Framework (Education)* —of particular relevance to this article – was intended to be applicable to all educational institutions and organizations. Through its language, this version placed particular emphasis on K-12 schools, which had been widely identified as a sector that could benefit greatly from the introduction of quality principles and practices (Bradley, 1993; Fields, 1993; Schmoker and Wilson, 1993; Walpole & North, 2002). By emphasizing teaching-and-learning processes, and organizational support for elementary and secondary education reform, the "education Baldrige" addressed this need very directly. The Baldrige Foundation noted that "The importance of this [TQM/quality] thinking becomes apparent when one examines the experience of Baldrige Award winning school systems. Schools, administrators, and teachers are balancing multiple, often competing factors, that leave schools with inadequate resources, teachers with not enough time, and students with difficulty focusing on learning." (Baldrige Foundation, 2020b)

For multi-mission colleges and universities, where research, community service and outreach functions, as well as teaching-and-learning are critical, the applicability of the Baldrige framework

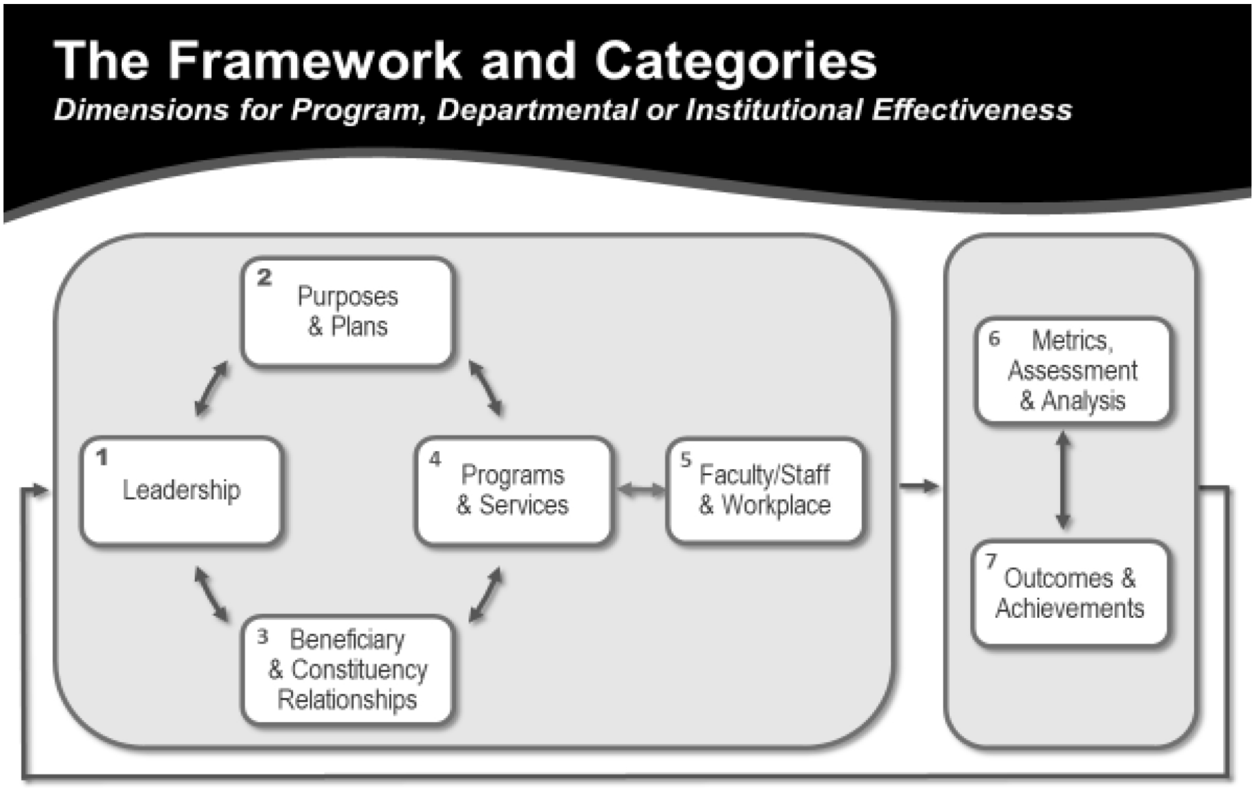
(Education) was less obvious to many. In higher education, there was a need for a model that could guide assessment, planning, and improvement across multiple functions and multiple divisions including administration, finance, facilities, information technology, human resources, athletics and also in academic areas including teaching-and-learning, research, outreach/public service, and patents/technology transfer.

The terminology used in the Baldrige framework (Education) drew heavily on core TQM and Baldrige concepts, including "customer focus," "process management," "products," "suppliers," "deployment," and "results," which presented another obstacle to adoption (Fairhurst, 1993). Particularly among faculty there was a considerable discomfort with "business oriented" concepts and language and the perceived mismatch with the culture and traditional values of higher education. Leadership resistance also created an obstacle to embracement. This was a particular problem relative to core academic functions where systematic and continuous improvement could have been of particular value (Ruben, 1995b, 2006, 2007, 2018; Neel and Snyder, 1991. Papanthymou & Darra, 2017; Seymour & Collett, 1991; Walpole & North, 2002; Zabadi, 2013).

At larger institutions, there was an additional impediment. Within *individual* academic, administrative, service, student affairs, or athletics divisions, some leaders saw the value of applying continuous improvement thinking, but that enthusiasm was typically not equally shared across a large number of other units, and generally not by those whose support would be necessary to engage the institution as a whole (Ruben, 2017; Walpole and North, 2002). At the time, assessments and awards applications by individual departments was not an option provided by the Baldrige Program. As a result, the most appropriate strategy for advocates of continuous improvement was often judged to be an incremental one – working with leaders and departments who were willing to explore adoption within their individual units, with the hope of building broadened institutional support among other leaders through word of mouth (Ruben, 2005, 2006, 2017).

It was in this context and for these reasons that the Excellence in Higher Education framework was developed (Ruben, 2016a). Paralleling the *Baldrige Excellence Framework*, EHE included seven categories considered to be necessary components of excellence in any college or university at various levels – a program, department, center, school, college, or university (Ruben, 2016a). Figure 1 provides an overview of the basic EHE framework, which depicts an educational enterprise as a system, and the overall performance and sustainability of that system is seen as a consequence of the quality of the seven components, and of the interactions and alignment among them (Ruben, 1995b; Ruben and Gigliotti, 2019; Ruben et al., 2017). EHE has been updated and revised regularly since the mid-1990s. The most recent revision – the eighth edition – was published in 2016 (Ruben, 2016a, 2016b).

Figure 1 EHE: The Framework and Categories



EHE is built on a foundation that recognizes the desirability of incorporating fundamental organizational principles within higher education, including the following:

- Effective *leadership* that provides guidance and ensures a clear and shared sense of organizational mission and future vision, a commitment to continuous review and improvement of leadership practice, and social and environmental consciousness.
- An inclusive *planning process* and coherent plans that translate the organization's mission, vision, and values into clear, aggressive, and measurable goals that are understood and effectively implemented.
- *Knowledge of the needs, expectations, and satisfaction/dissatisfaction levels of the groups served by the organization*; operating practices that are responsive to these needs and expectations; and assessment processes in place to remain current with and anticipate the changing needs of these groups.
- *Focus on mission-critical and support programs and services* and associated work processes to ensure effectiveness, efficiency, appropriate standardization, documentation, and regular evaluation and improvement with the needs and expectations of beneficiaries and stakeholders in mind.
- A *workplace culture* that encourages, recognizes, and rewards excellence, employee satisfaction, engagement, professional development, commitment, and pride; and provides

strategies for synchronizing individual and organizational goals.

- Development and use of *indicators of organizational performance* that capture the organization's mission, vision, values, and goals and provide data-based comparisons with peer and leading organizations; widely sharing this and other information within the organization to focus and motivate improvement and innovation.
- *Documented, sustained positive outcomes* relative to the organizational mission, vision, values, and goals, the perspectives of groups served, and employees, all considered in light of comparisons with the accomplishments of peers, competitors, and leaders (Ruben, 2016a; Ruben and Gigliotti, 2019).

The Excellence in Higher Education (EHE) program has been adopted and applied in numerous ways in many colleges and universities of varying types and sizes, and the value of this work has been recognized nationally by the Baldrige Foundation (Baldrige Foundation, 2018), and the Network for Change and Continuous Improvement (NCCI, 2012). To date, more than 60 academic and administrative departments at Rutgers University have participated in the program. Roughly 50 other colleges and universities in the United States have also found this program helpful in their assessment, planning, and improvement efforts. Additionally, the model has been applied in various research and training contexts in Botswana, Canada, China, Chile, Iran, Northern Ireland, Qatar, Saudi Arabia, and Thailand, and the EHE guide has also been translated and published by Wuhan University Press for use in China (Ruben, 2015).

The EHE framework and process have been studied and found to be beneficial in a number of respects. With support from the Lumina Foundation, the National Association of College and University Administrators carried out a national research initiative to study Baldrige/EHE in 2010–2011 (NACUBO, 2011). The study focused on initiatives at eight U.S. colleges and universities – American University, Rogue Community College, Marist College, University of North Texas Health Sciences Center, University of Georgia, Loras College, California State University System, and California State University-San Bernardino – where EHE was introduced. At each institution, the framework was employed to address one of three specific goals: (1) improving and strengthening core functions (financial planning, accreditation, and IT); (2) creating and implementing new practices (space measurement and planning, safety, human resources, and performance management); and (3) promoting multi-campus and system-level change (organizational change and innovation, and operational process improvement).

The NACUBO-Lumina studies confirmed earlier findings relative to the value of the Baldrige/EHE framework to guide and motivate organizational improvement, introduce new and innovative practices, and facilitate multi-campus alignment and change. Two studies were also undertaken at Rutgers to assess the benefits of the EHE assessment process (Ruben et al., 2004; Ruben et al., 2007). Findings from these studies pointed to the value of the EHE organizational self-assessment process in the acquisition of a knowledge and theory base, in the clarification of organizational strengths, and in the pursuit of critical improvement needs. (Ruben et al., 2004; Ruben et al., 2007).

A Critical Moment in the History of U.S. Higher Education

The Baldrige approach and EHE were developed for use during “normal times” – when organizational assessment, planning, and incremental and continuous improvement were the typical applications of the framework. The COVID-19 pandemic has created unprecedented crisis conditions and existential threats for organizations in various sectors including higher education (Chronicle of Higher Education, 2020b). Colleges and universities have had to confront organizational challenges related to instructional delivery, campus openings and closings (temporary and permanent), long-term financial stability (Chronicle of Higher Education, 2020a; Associated Press, 2020), employment (Chronicle of Higher Education, 2020b), campus governance, faculty engagement in decision-making, confidence in administrators (Flaherty, 2020; Murphy, 2020; Paquette, 2020), and many other issues (Fernandes, 2020; Furstenberg, 2020; Nadworny, 2020; Vedder, 2020; Zahneis, 2020; Zwickel, 2020). These disruptions have raised an important question as to whether and how Baldrige and EHE concepts might apply in this context.

This crisis in higher education is defined by three conditions that are unlikely to be resolved easily or rapidly:

1. Social distancing in an industry where social interaction and physical presence are central to the work we do, whether it occurs in the classroom, the dorms and fraternities/sororities, or in the labs, libraries, and field sites where students and faculty conduct their research.
2. Fiscal emergencies in a sector that has confronted financial challenges for some time, especially but not exclusively at schools that receive state funding, and at small private institutions that were struggling financially before the pandemic. Unpredictability of demand/tuition revenue as well as the impact on revenue from auxiliary services, such as sports, summer rentals of facilities, campus stores, and restaurants, etc., coupled with increased financial need among students, also contribute to the prospects of personnel reassignments and layoffs. Many universities also host a large number of international students, and most pay the full tuition load. If they are not coming back, this will cause additional financial challenges for these institutions.
3. Increasing demand for health care services delivered in hazardous conditions for those schools with medical schools/hospitals, while simultaneously losing revenue from delayed elective surgeries (S. Lawrence, personal communication, May 2, 2020).

Rather than incremental and continuous change, evidence-based radical change is likely to be necessary for many if not most colleges and universities. Relevant questions for this crisis context will relate to whether and how core missions, visions, program and service offerings, stakeholder relationships, assessment approaches, and communication strategies, may need to change. And importantly, how will academic and administrative leaders guide faculty and staff through a process of systematic review, reflection, and reinvention while fostering resilience and maintaining core values and a sense of community. And how will these difficult decisions be made and communicated? Many of these changes will need to be made quickly in order to respond to the "new normal" and to exercise some control in the creation of viable future options (Cantwell and Taylor, 2020; Kelchen, 2020; Whitford, 2020).

The Excellence in Higher Education-Renewal (EHE-R) Framework

The following sections describe a reframing and expansion of the EHE/Baldrige model (Ruben, 2016a) to assist college or university leaders, faculty, and staff in identifying critical questions to guide institutional response and rebuilding within a unit, school, or institution. Termed, Excellence in Higher Education-Renewal (EHE-R), the framework is designed to assist college and university leaders in a systematic process of conceptualizing, reimagining, and implementing elements of the path forward to the "new normal."

EHE-R aggregates and catalogues critical questions related to mission and vision, changing priorities, modifications in programs and services, and adjustments in faculty and staff responsibilities in the face of shifting needs among present and potential students and other constituencies in the dramatically transformed environment. And, most fundamentally, EHE-R identifies critical issues for leaders at all levels of their organizations as they guide and support the community through the process of review and renewal. Given these aims, the EHE-R model is built on a foundation that recognizes the importance of each of the seven EHE components in the context of organizational reimagination and renewal, as shown in Table 1 (Ruben, 2020).

Table 1 EHE-R Category Summaries

Excellence in Higher Education—Renewal (EHE-R) Category Summaries	
Category 1 ***Leadership***	Communicating core values and a forward-looking vision that underscores the importance of reviewing, revisiting, reconfirming, or revising purposes, aspirations, and priorities.
Category 2 ***Purposes and Plans***	Creating a time-sensitive process for systematically considering directions, aspirations, plans, strategies, goals, action steps, and measuring progress and outcomes with attention to community engagement.

Category 3 ***Beneficiary and Constituency Relationships***	Listening to, understanding, and responding to the immediate and forward-looking needs of students, prospective students, and other key constituencies and collaborators served by the core missions of the institution to sustain and ideally strengthen relationships going forward.
Category 4 ***Programs and Services***	Engaging in a review of mission-critical and support programs and services in relation to defined criteria with the goal of identifying action plans for each.
Category 5 ***Faculty/staff and Workplace***	Recognizing and supporting faculty, staff, and community support needs while reviewing roles and responsibilities and determining needed actions.
Category 6 ***Assessment and Information Use***	Assessing, communicating, and using progress and outcomes information relative to initiated changes for monitoring and refining directions and future planning.
Category 7 ***Outcomes and Achievements***	Documenting, promoting, and sharing evidence of progress, achievements, and peer comparisons for use in day-to-day decision-making, planning, and future strategy formulation.

Integrating the EHE and EHE-R Perspectives

The following sections provide an adaptation of core concepts of the EHE model (Ruben, 2016a) to define a review, planning, and strategy formulation framework for college and university leaders as they initiate efforts to evaluate and reinvent their future. This modified EHE framework – termed Excellence in Higher Education-Renewal (EHE-R) – poses questions in each of the seven categories. To make these lists somewhat more manageable, within each category, questions are divided into those that are likely essential and others that may be of secondary importance. This categorization and the full array of questions may not be appropriate in all cases. Rather, each unit, school, or the leadership of the institution should prioritize and sequence these questions in a manner that makes sense for the challenges and timing at hand, as discussed later in the article.

Category 1—Leadership

Category 1 focuses on leadership approaches and governance systems in advancing the mission of an institution, department, or program; how leaders establish and communicate aspirations; how leaders set goals, promote innovation; how leaders allocate resources to accomplish priority goals; and how leadership and leadership practices and performance are reviewed and evaluated (Ruben, 2016a). Even in stable times, these are challenging issues. In the midst of and following a crisis, the leadership questions and those included in the following pages are especially challenging. Particularly critical during this stage is the dynamic relationship between the formal leadership structure, leaders appointed to positions during or post-crisis, and the communication process necessary to assure effective information sharing and collaboration. Breakdowns in these areas—which can easily occur during times of transition and renewal—can have very negative and lasting consequences.

- What is the future that leaders envision for the unit/school/institution in this new environment, and what are the guiding principles and values necessary to achieve this vision?
- What preexisting leadership roles or structures need to be reimagined and refined? How will emergent leadership roles and decision-making protocols be coordinated with existing organizational structures, and how will communication infrastructures support both?
- What are the most critical leadership goals now and going forward?
- How can leaders build community and enhance resilience within the unit/school/institution? What messages are most essential at this moment in time, and how should they be disseminated?
- What settings can be created to allow ideas, proposals, and policies to be candidly discussed and evaluated by leaders across various administrative levels?

Category 2—Plans and Purposes

Clarifying an organization's mission, aspirations, goals, and developing and implementing plans to operationalize these directions are the central themes of Category 2 (Ruben, 2016a). The category also focuses on the importance of environmental scanning, benchmarking comparisons with other organizations, and the alignment and coordination of plans and action steps throughout the organization. This category also considers how faculty and staff and other relevant stakeholders are engaged in defining aspirations and goals and in creating and implementing plans within the organization. Adapting these themes to a post-crisis environment is difficult, but very important. Major substantive issues relate to time and timing. Each unit, school, and institution will need to determine the appropriate time to undertake the planning process, how to prioritize the issues involved, and how to balance needs for expeditious forward movement with meaningful engagement of leaders at all levels and faculty and staff.

- What will be the timing and the process through which a vision for the future, shared priorities, plans, and goals for the unit/school/institution are formulated?
- How will organizational structures, personnel, and processes be involved in guiding the planning process?
- What current strengths, weaknesses, opportunities, threats, and other criteria should be important considerations in the planning processes, and what information is available to provide clarity in each area?

- How will consultation and creative problem-solving be enhanced to inform the new vision?
  How will faculty, staff, students, and other groups' perspectives be represented in planning? How will meetings be structured to benefit from the collective intelligence of the community?
- How will plans across the unit/school/institution be communicated, coordinated, and aligned, and how will common and cross-cutting priorities be determined?

Category 3—Beneficiary and Constituency Relationships

The focus of Category 3 is stakeholders who benefit from, influence, or are influenced by the core functions of the organization. Among the stakeholder groups that are considered – depending on the work/school/institution – are students, faculty (full-time and contingent), staff, patients/clients, future employers, alumni, members of relevant disciplinary or professional communities, governmental agencies, and the many public and societal beneficiaries, along with internal institutional service units, and collaborators or suppliers in other academic or administrative units. The diverse array of relationships, all of which are likely to have been disrupted in multiple ways, makes this a complex and multifaceted topic.

- How will students be served post-crisis? For example, consider how units/schools/the institution will address issues related to health and safety, finances, campus residence, dining services, campus life, campus transportation, direct interaction with faculty, research engagement, advising, psychological and career counseling, sense of community and ownership, and others.
- What other groups and organizations are traditionally served by the work of the unit/school/institution, what specific benefits have been provided for each, in what ways are these relationships mutually beneficial, and how will these needs and relationships be prioritized and addressed going forward?
- What programs, offices, and services should be available to provide academic, emotional, financial, and social support for students and other constituency groups? How will these programs and services be coordinated, and how will their availability be communicated?
- What groups are critical collaborators, partners, and suppliers for the unit/school/institution, and how will their expectations and future-oriented needs be assessed and addressed?
- What communication approaches will be needed to sustain relationships with each beneficiary and constituency group?

Category 4—Programs and Services

Sustaining quality in mission-critical academic and administrative programs and services is the primary theme of Category 4 (Ruben, 2016a). The nature of the mission, programs, and services will vary substantially depending on whether the work of the unit involves academics, administration and support services, student services, facilities, athletics, or other functions. The category focuses on how an organization identifies, documents, evaluates, and improves each mission-critical program and service, as well as how particular programs and services become priorities for refinement, restructuring, or discontinuation. Consideration is also given to support services and processes, which often operate out of public view, but are essential to achieve and sustain a high level of quality and performance within any organization. In mission-critical, and support services and processes, higher education is generally more accustomed to adding new programs and services than it is to downsizing, reshaping, restructuring, or terminating existing initiatives, all of which may well be options that will require serious consideration in post-crisis decision-making.

- How will programs and services be systematically reviewed, inventoried, and prioritized, and what changes will be needed in these offerings going forward?
- What criteria—and weightings of these criteria—should be used in reviewing and considering program/service prioritization and possible changes? For example, consider criteria such as mission centrality, alignment with aspirations, importance to stakeholders, distinctiveness, safety, resources required and revenue generated, redundancy, importance to faculty and staff, and reputational contribution.
- What programs, services, or centers are candidates for initiation, improvement, expansion, downsizing, restructuring, or discontinuation?
- How can virtual and other technologies be used to support various mission-critical functions and important administrative and support needs going forward?
- What innovations are possible in mission-critical, administrative, and support processes? If these innovations are elements of a revised vision for the unit/school/institution, how will this vision encourage the development of programs, services, and systems that are lean, free of waste, and do not duplicate other efforts? For example, consider adding more online teaching/learning technology and support systems, streamlining processes, expanding collaborations, eliminating duplication, sharing services, utilizing space and structures more efficiently, minimizing travel, and enhancing safety.

Category 5—Faculty/Staff and Workplace

The capability of the faculty and staff, and the nature of the organizational culture, climate, and workplace are the topics of Category 5 (Ruben, 2016a). The category considers how the program, department, or institution being reviewed recruits, supports, and retains faculty and staff; creates and maintains a positive workplace culture and climate; and recognizes and rewards accomplishments and superior performance. In normal times, the usual focus is on recruitment, orientation, recognition, and professional development of faculty and staff. In periods of post-crisis renewal, these considerations are likely to be accompanied, and perhaps replaced by, an emphasis on technical, emotional, and financial support, and issues related to possible reassignment, expanded or shifting roles and responsibilities, retraining and cross-training, and potential temporary or more permanent layoffs. While none of these options are likely to be pleasing, what can be helpful in confronting this situation, in addition to effective faculty and staff communication and support mechanisms, is a systematic approach to thinking through questions of value and purpose along with institutional, school, or unit priorities, and then implementing personnel changes with sensitivity, compassion, and appropriate transitional support.

- How will faculty and staff uncertainties and morale issues related to health, safety, security of their employment, transportation, and possible personnel changes be addressed?
- What values and principles should be the focus of communication and engagement efforts with faculty and staff in the present situation and going forward?
- What is the distribution of faculty and staff work roles and responsibilities, and what opportunities/necessities exist for recalibration, reallocation, temporary or longer-term reassignment, cross-training, and professional development to address needed changes in workload and workplace priorities? How will right-sizing or downsizing be handled?
- What services will be needed to support faculty and staff in times of transition, reinvention, and renewal?
- What innovations in faculty and staff work practices are possible? For example, consider technological innovations to facilitate virtual work, flex-time and cross-training options, shift work, administration-union collaboration, and new approaches to balancing personal, family, and professional responsibilities.
- What communication approaches will be needed for two-way communication with faculty and staff, and how will these communication efforts be planned and coordinated?

Category 6—Metrics, Assessment, and Analysis

Category 6 focuses on the criteria, methods, and metrics by which the organization assesses its effectiveness in fulfilling its aspirations and core mission, or missions, and delivering programs and services. Also considered are methods and processes for assessing relationships with current and prospective students and other constituencies and collaborators, faculty/staff and workplace considerations, and the performance of the organization in the other EHE categories (Ruben, 2016a, 2016b). Performance-oriented information is always an asset to organizational effectiveness, and this resource becomes particularly critical in a period where expeditious and forward-oriented decision-making is required. Data collection and access should be made as simple and automatic as possible, and to the extent feasible, should be embedded in the workflow so that these activities do not require a major expenditure of time. These processes should contribute to scenario planning, assessing progress on selected plans and goals, and evaluating the potential impact of decisions to postpone, expand, downsize, restructure, or discontinue specific programs or services.

- What will be the critical measures for assessing progress on visions, priorities, plans, and goals, and how will these be determined?
- What relevant information is currently available, and what additional information is needed to assist with assessment and outcomes tracking—now and going forward?
- What methods will be used to collect, organize, and disseminate assessment information for use in planning and operational decision-making?
- What individuals, teams, or offices will coordinate assessment and the integration of available performance data for planning and decision-making?
- How are similar units/schools/institutions dealing with the challenges of forward planning and strategy formulation during this time period, and what useful lessons can be learned from a better understanding of their problems, solutions, and experiences?
- How will assessment methods and information sharing systems be evaluated and refined to respond to changing conditions?

Category 7—Outcomes and Achievements

The final category focuses on outcomes, with an emphasis on collecting, assembling, and providing evidence based on the metrics and methods identified in Category 6 (Ruben, 2016a, 2016b). In general, this category asks for information on accomplishments and evidence to document or demonstrate the quality and effectiveness of the organization, and in this context, to identify and communicate progress in each priority area, to make useful comparisons to peer and leading organizations and institutions, and to identify areas where changes are not leading to envisioned outcomes, and to motivate necessary changes. All of these purposes take on added significance during times of disruption and renewal.

- What metrics and outcomes information relative to progress, outcomes, accomplishments, and priorities should be collected, and how should this information be organized?
- What information should be shared, when, how often, and with what audiences?
- How will outcomes information be utilized for tracking progress and trends, documenting outcomes, assuring accountability, making benchmark comparisons, identifying successes and gaps, and guiding change? For example, consider whether and how progress, trend, and benchmark comparison information will be disseminated and used by leaders, faculty, and staff; will dashboard displays be created for easy access to data; will improvement needs and opportunities identified through assessment be documented and shared; and will a unit/school/institution case study

narrative be developed?
- What opportunities can be identified for institutional and scholarly research and cross-institutional sharing of outcomes assessment information and effective practices?

The Process for Using the EHE and EHE-R Models

There are many ways in which the models and questions provided in the previous pages can be used. As EHE has been typically implemented, the process engages leaders, faculty, and staff in a self-assessment and self-reflective activity that provides a foundation for identifying and launching improvement plans. The framework is used by a leader or leadership team as a checklist and guide. Reviewing and addressing questions oneself or with a small group is quicker and more convenient than engaging a broader group of faculty and staff. However, wider participation and input has numerous benefits. Particularly where the purpose of the review is to conceptualize and formulate forward-looking plans, more representative involvement helps to create a shared understanding of needs and priorities. This process also contributes to an alignment across EHE categories and the commitment necessary to help mobilize and motivate the group to move forward constructively.

When used for review, planning, and strategy formulation in a crisis response and renewal context, the process would begin with a review of each of the seven categories, the concepts noted for each, and the listed questions. Because each unit, school, or institution will have different purposes, needs, and time constraints, the logical place to begin is by a determination of which of the listed questions are of greatest relevance and priority. That list – and any additional questions that a group would like to add – can be sequenced based on need, timing, potential impact, or other criteria judged to be relevant. This could be done in a way that creates a "high," "moderate," and "lower" priority list for each category. A next step would be discussing each of the prioritized questions in turn and what specific issues are of greatest concern for each question.

Following review and prioritization, the effort would shift to planning and strategy development. For each priority item, this would involve a determination of what key action steps are required, who will be responsible for leading the effort, what deliverables are expected, what resources will be needed, and what the implementation timeline should be (Ruben, 2016b). The results of the review, prioritization, strategy formulation, and implementation action planning should be documented, and shared, with appropriate metrics being used for tracking progress and outcomes going forward. Additional items not on the original priority "short list" can be revisited as a focus for later attention.

Conclusions and Future Research

As leaders of higher education departments, schools, and institutions of all types and sizes confront uncertainty and disruption, there is a need for rigorous, systematic and proactive approaches to guide review, assessment, and strategy formulation activities. The adoption of the EHE-R framework—and the Baldrige and EHE categories on which it is based—can be useful for analysis and decision making as higher education institutions and their constituent schools and departments plan for the future.

The EHE framework also provides a very useful foundation for externally required program review and institutional accreditation (Ruben, 2007). Clearly, the tumultuous organizational disruptions brought about by current contemporary challenges to colleges and universities will provide greater value to a framework such as EHE/EHE-R in preparing for reviews and accreditation processes, and indeed for reviews for other purposes as well.

As the EHE-R framework is applied in various ways within colleges and universities, it will be important to undertake studies to assess its value. These investigations might take a number of paths. An analysis of the perceived value and documented impact of the framework in promoting organizational adaptability, efficacy, and sustainability would provide an important baseline. Additionally, studies of the extent to which faculty and staff engagement in the EHE-process contributes to a shared sense of organizational priorities, support for innovation and transformative problem solving, an enhanced sense of empowerment, and greater confidence in leadership and governance practices would be potential topics of focus. Follow-up studies to determine the extent to which the EHE-R process contributed to specific, tangible, and longer-term organizational change would also have considerable value.

Key Takeaways

- Colleges and universities face a number of major challenges at the present time — challenges which threaten the missions, aspirations, programs, and sustainability of many higher education institutions, and their constituent units.
- Baldrige-oriented thinking, such as that provided by the Excellence in Higher Education-Renewal (EHE-R) framework, can provide a useful guide for leaders in conducting systematic review, strategy development, and planning to identify priorities for change during and following a period of crisis.
- The Baldrige framework was developed for use in "normal times," when the goals of assessment, planning, and incremental improvement were primary aims. In the current situation, transformational and radical change needs to be considered along with incremental change. The expanded EHE-R framework directs leaders to key questions to help determine the extent and nature of organizational change that may be needed, and how best to address those priorities.
- Baldrige-oriented thinking can be very useful in crisis and crisis recovery situations for higher education and other sectors, helping leaders translate complex problems into opportunities for meaningful organizational transformation.

References

Abdulla B. M., and H. Selim, K. Alshare, E. Grandon, H. Younis, and M Abdulla. 2006. "The Baldrige Education Criteria for Performance Excellence Framework: Empirical test and validation." *International Journal of Quality & Reliability Management, 23*(9), 1118–1157. https://doi.org/10.1108/02656710610704249.

Associated Press. 2020. "Johnson & Wales to close Florida, Colorado campuses. "*Associated Press News*, June 25,.https://apnews.com/446afa5f3deb472569708a21b126fbc7?utm_source=Iterable&utm_medium=email&utm_campaign=campaign_1316689&cid=db&source=ams&sourceId=24682.

Badri, M. A., H. Selim, K. Alshare, E. Grandon, H. Younis, and M. Abdulla. 2006. "The Baldrige Education criteria for Performance Excellence Framework: Empirical test and validation." *International Journal of Quality & Reliability Management, 23*(9), 1118–1157.

Baldrige Foundation. 2018. "Rutgers University Dr. Brent Ruben earned the first Baldrige Foundation Award for Leadership Excellence in Education at @BaldrigeQuest." https://twitter.com/BaldrigeFdn/status/999027158436728832.

Baldrige Foundation. 2020a. "Our History. Baldrige Foundation." https://baldrigefoundation.org/who-we-are/history.html.

Baldrige Foundation. 2020b. "Baldrige Impact in Education: #BaldrigeTransformsLives." https://baldrigefoundation.org/what-we-do/our-impact/education-impact.html.

Baldrige Performance Excellence Program. 2020. National Institute of Standards and Technology. https://www.nist.gov/baldrige/how-baldrige-works/about-baldrige/history.

Bradley, L. 1993. *Total quality management for schools.* Lancaster, PA: Technomic Publishing.

Cantwell, B., and B. J. Taylor. 2020. "It's time for radical reorganization. Crises spur intense competition among colleges. There's a better way." *The Chronicle of Higher Education,* April 16. https://www.chronicle.com/article/It-s-Time-for-Radical/248530.

Chronicle Staff. 2020a. "The Coronavirus Is Upending Higher Ed. Here Are the Latest Developments." *The Chronicle of Higher Education*. March 3. https://www.chronicle.com/article/The-Coronavirus-Is-Upending/248175.

Chronicle Staff. 2020b. "As Covid-19 pummels budgets, colleges are resorting to layoffs and furloughs." *The Chronicle of Higher Education*. May 13. https://www.chronicle.com/article/As-Covid-19-Pummels-Budgets/248779?utm_source=at&utm_medium=en&utm_source=Iterable&utm_medium=email&utm_campaign=campaign_1328087&cid=at&source=ams&sourceId=24682.

Dawson, J. 2016. Benefitting the lab with Baldrige. *Medical Lab Management, 5*(3), April, 2. https://www.medlabmag.com/article/1276/April_2016/Benefiting_the_Lab_with_Baldrige/.

DeCarlo, N. J., and W. K. Sterett. 1989. "History of the Malcolm Baldrige National Quality Award*." The Journal of the Japanese Society for Quality Control,* July.

Evans, J. R., and E. P. Jack. 2018. "Validating Key Results Linkages in the Baldrige Performance Excellence Model." *Quality Management Journal,* 10(2) 7-24. https://doi.org/10.1080/10686967.2003.11919060.

Fairhurst, G. T. 1993. Echoes of the vision: When the rest of the organization talks total quality. *Management Communication Quarterly,* 6(4), 33-371.

Fields, J. C. 1993. *Total Quality for Schools.* Milwaukee, WI: ASQC Quality Press.

Fernandes, D. 2020. "Amid coronavirus pandemic, a growing list of colleges in financial peril." *Boston Globe Video.* Updated May 8.

https://www.bostonglobe.com/2020/05/08/metro/amid-pandemic-growing-list-colleges-financial-peril/.

Flaherty, C. 2020. "Mounting faculty concerns about the fall semester." *The Chronicle of Higher Education.* June 30, 2020.

https://www.insidehighered.com/news/2020/06/30/faculty-concerns-about-fall-are-mounting?utm_source=Inside+Higher+Ed&utm_campaign=c826a9c0cd-DNU_2019_COPY_02&utm_medium=email&utm_term=0_1fcbc04421-c826a9c0cd-198447317&mc_cid=c826a9c0cd&mc_eid=a68e94a282

Foundation of the American College of Healthcare Executives. 2015. "The Baldrige journey: In pursuit of excellence." *Frontiers of Health Services Management. 32*(1), Fall. https://journals.lww.com/frontiersonline/Citation/2015/07000.

Flynn, B. B., and B. Saladin. 2001, "Further evidence on the validity of the theoretical models underlying the Baldrige criteria." *Journal of Operations Management.* 19(6), 617-65. https://doi.org/10.1016/S0272-6963(01)00072-9.

Furstenberg, F., 2020. "University leaders are failing." *The Chronicle of Higher Education,* June 26, 66(32) 30-31.

Gigliotti, R. A. 2020. *Crisis leadership in higher education: Theory and practice.* Rutgers University Press.

Goonan, K. J. 2015. "Can Baldrige build learning organizations?" *Frontiers of Health Services Management, 32*(1), 32–38. https://journals.lww.com/frontiersonline/Citation/2015/07000/Can_

Baldrige_Build_Learning_Organizations_.4.aspx

June, A. W. 2020. "Five facts about the higher-ed work force. "*The Chronicle of Higher Education,* June 26, 66(32) 9.

Kelchen, R. 2020. "How will the pandemic change higher education? Professors, administrators, staff on what the Coronavirus will leave in its wake." *The Chronicle of Higher Education,* April 10, https://www.chronicle.com/article/How-Will-the-Pandemic-Change/248474.

Leist, J. C., S. C., Gilman, R. J Cullen, and J. Sklar. 2004. "Using Baldrige Criteria to meet or exceed accreditation Council for Continuing Medical Education Standards." *The Journal of Continuing Education in the Health Professions, 24*, 57–63.

Malcolm Baldrige National Quality Program. 2020. "What is the Malcolm Baldrige National Quality Award (MBNQA)?" https://asq.org/quality-resources/malcolm-baldrige-national-quality-award.

Nadworny, E. 2020. "Can colleges survive Coronavirus? 'The math is not pretty'" NPR, April 20. https://www.npr.org/2020/04/20/833254570/college-brace-for-financial-trouble-and-a-big-question-will-they-reopen-in-fall

National Association of College and University Business Officers (NACUBO). 2011. *Challenge to Change: A Report of the NACUBO Baldrige Challenge 2010 Initiative*. https://www.researchgate.net/publication/267094810_Challenge_to_Change_A_Report_on_the_NACUBO_Baldrige_Challenge_2010_Initiative.

National Consortium for Continuous Improvement in Higher Education (NCCI). 2012. Winners of the 2012 National Consortium for Continuous Improvement in Higher Education (NCC) Leveraging Excellence Award. https://www.prnewswire.com/news-releases/winners-of-the-2012-national-consortium-for-continuous-improvement-in-higher-education-ncci-leveraging-excellence-award-150949205.html.

National Institute of Standards and Technology (NIST). 2016. Benefits of the Baldrige Framework in U.S. health care: A summary of recent news, April 18. https://www.nist.gov/news-events/news/2016/04/benefits-baldrige-framework-us-health-care-summary-recent-news.

National Institute of Standards and Technology. 2019. Baldrige helping organizations succeed for 30 years. https://www.nist.gov/baldrige/baldrige-helping-organizations-succeed-30-years.

National Institute of Standards and Technology. 2020a. Baldrige Performance Excellence Program, 2020, April 18. https://www.nist.gov/baldrige.

National Institute of Standards and Technology. 2020b. Baldrige Excellence Framework (Business, 2019–2020), April 5. https://www.nist.gov/baldrige/publications/baldrige-excellence-framework/businessnonprofit.

National Institute of Standards and Technology. 2020c. Baldrige Excellence Framework (Healthcare, 2019–2020). April 5. https://www.nist.gov/baldrige/publications/baldrige-excellence-framework/health-care.

National Institute of Standards and Technology. 2020c. Baldrige Excellence Framework (Education, 2019–2020), April 5. https://www.nist.gov/baldrige/publications/baldrige-excellence-framework/education.

National Institute of Standards and Technology. 2020d. Baldrige Excellence Framework (Education, 2019–2020), April 5. https://www.nist.gov/baldrige/publications/baldrige-excellence-framework/education.

Neel, C. W. and W. T. Snyder. 1991. "Building responsive universities: Some challenges to academic leadership." In *Competing globally through customer value,* edited by M. J. Stahl and G. M. Bounds, 67-72. Washington, DC: Quorum

Paquette, G. 2020. "Bashing administrators while the college burns: Denunciation, recrimination, and grandstanding are pit stops on the road to oblivion. "*The Chronicle of Higher Education,* June 26, 66(32) 32-33.

Peng, X. and V. R. Prybutok. 2015. "Relative effectiveness of Malcolm Baldrige national quality award categories." *International Journal of Production Research,* 53(2). 629-647, DOI: https://www.tandfonline.com/doi/abs/10.1080/00207543.2014.961207.

Murphy, J. PennLive. 2020. "More than 1,000 faculty and other employees raise concerns about Penn State's fall reopening plans," *PennLive Patriot-News*. June 16, https://www.pennlive.com/news/2020/06/more-than-1000-faculty-and-other-employees-raise-concerns-about-penn-states-fall-reopening-plans.html.

Papanthymou, A., and M. Darra. 2017. "Quality management in higher education: Review and perspectives,."*Higher Education Studies,* 7(3), 132-147.

Prybutok, V., X. Zhang, and D. Peak. 2011. "Assessing the effectiveness of the Malcolm Baldrige National Quality Award model with municipal government." *Socio-Economic Planning Sciences,* 45(3), September, 118-129. https://doi.org/10.1016/j.seps.2010.12.003.

Reimann, C. W. 1992. "The first Five Years of the Malcolm Baldrige National Quality Award." *Proceedings of IMPRO1992*. Wilton, CN: Juran Institute.

Ruben, B. D. 1994. *Tradition of excellence: Higher education quality self-assessment guide.* Dubuque, IA: Kendall-Hunt.

Ruben, B. D. 2004. *Pursuing excellence in higher education: Eight fundamental challenges*. San Francisco: Jossey-Bass.

Ruben, B. D. 1995a. *Quality in higher education.* New Brunswick, NJ: Transaction.

Ruben, B. D. 1995b. "The quality approach in higher education: Context and concepts for change." B. Ruben, ed., In *Quality in higher education.* New Brunswick, NJ: Transaction.

Ruben, B. D. 2005. "The Center for Organizational Development and Leadership at Rutgers University: A Case Study." *Organization Development and Change in Universities*. A special issue of *Advances in Developing Human Resources*, 7(3), 368-395.

Ruben, B. D. 2006. "Departmental Effectiveness: What Is It? Why Is It Important? How Can It Be Achieved?" *Effective Practices for Academic Leaders,* 1(12).

Ruben, B. D. 2007. "Higher education assessment: Linking accreditation standards and the Malcolm Baldrige criteria." *New directions for higher education***.** In Susan C. White and Theodore S. Glickman, eds., New York: Wiley, 137, 59–83.

Ruben, B. D. 2015. 布兰特•罗本, 卓越高等教育指南:大学评测、(*Excellence in higher education guide: An integrated approach to assessment, planning and improvement in colleges and universities).* 规划和改进整合方法 (2010版), 武汉大学出版社 中国武汉. Wuhan, China: Wuhan University Press.

Ruben, B. D. 2016a) *The Excellence in Higher Education Guide: A framework for the design, assessment and continuous improvement of institutions, departments, and programs.* Sterling, VA: Stylus.

Ruben, B. D. 2016b. *The Excellence in Higher Education Guide: Workbook and scoring instructions.* Sterling, VA: Stylus.

Ruben, B. D. 2018. "The Baldrige Foundation Outstanding National Leadership Award in Education University Lecture: The Bumpy Road to the Promised Land." May 1. Rutgers University. https://ol.rutgers.edu/wp-content/uploads/2018/06/baldrige-talk-text-official-reprint-final-05-17-18.pdf.

Ruben, B. D. 2020. *Guidance for college and university planning for a post COVID-19 world. Applying the Excellence in Higher Education framework. EHE-R Renewal.* Sterling, VA: Stylus. file:///C:/Users/bruben/Downloads/9781620364000_28_e6be58c351f93a5d29df94e4354fcfd0.pdf.

Ruben, B. D., S. L. Connaughton, K. Immordino, and J. Lopez. 2004. *What impact does the Baldrige/Excellence in Higher Education Self-Assessment process have on institutional effectiveness? preliminary research findings.* Annual Conference of the National Consortium for

Continuous Improvement in Higher Education, Milwaukee, WI, July.

Ruben, B. D., R. De Lisi, and R. A. Gigliotti. 2017. *A guide for leaders in higher education.* Sterling, VA: Stylus. See chapter 12.

Ruben, B. D., and R. A. Gigliotti. 2019. "The Excellence in Higher Education model: A Baldrige-based tool for organizational assessment and improvement for colleges and universities." *Global Business and Organizational Excellence, 38*(4), May/June, 26–37.

Ruben, B. D., T. Russ, S. M. Smulowitz, and S. L. Connaughton. 2007. Evaluating the impact of organizational self-assessment in higher education: The Malcolm Baldrige/*Excellence in Higher Education* Framework. *Leadership and Organizational Development Journal, 28*(3), 230–249.

Schmoker, M., and R. B. Wilson. 1993. "Transforming Schools through Total Quality Education*," The Phi Delta Kappan,* 74(5) 389-395.

Schulingkamp, R. C., and J. R. Latham. 2015 "Healthcare performance excellence: A comparison of Baldrige award recipients and competitors." *Quality Management Journal,* 22(3), 6-22. DOI: https://www.tandfonline.com/doi/abs/10.1080/10686967.2015.11918438

Sellnow, T. L., and M. W. Seeger. 2013. *Theorizing crisis communication.* Malden, MA: Wiley-Blackwell.

Seymour, D. and C. Collett. 1991. *Total quality management in higher education: A critical assessment*. Methuen, MA: GOAL/QPC.

Shook, J., and J. Chenoweth. 2012. "100 top hospitals CEO insights: Adoption rates of select Baldrige Award practices and processes." *Truven Health Analytics,* October. https://www.nist.gov/system/files/documents/baldrige/100-Top-Hosp-CEO-Insights-RB-final.pdf.

Sorensen, C. W., J. Furst-Bowe, and D. M. Moen. 2005. *Quality and performance excellence in higher education: Baldrige on campus*. Bolton, MA: Anker.

Sternick, E. D. 2011. Using Baldrige Performance Excellence Program approaches in the pursuit of radiation oncology quality care, patient satisfaction, and workforce commitment. *Frontiers of Oncology, 1*, 9. Published online: June 20. https://www.frontiersin.org/articles/10.3389/fonc.2011.00009/full.

Vedder, R. 2020. "Colleges on life support face three choices: Death, merge or Survive." May 18. https://www.forbes.com/sites/richardvedder/2020/05/18/colleges-on-life-support-face-3-choices--death-merger-or-survival/#24cc6cb3fb2c

Walpole, M. and R. J. Noeth. 2002. "The Promise of Baldrige for K–12 Education." ACT

POLICY REPORT. Iowa City, IA: American College Testing. https://www.immagic.com/eLibrary/archives/general/act_inc /A021112W.pdf.

Weeks, W. B., L. Hamby, A. Stein, and P. B. Batalden. 2000. "Using the Baldrige Management System framework in health care: The Veterans Health Administration experience." *Joint Commission on Accreditation of Healthcare Organizations, 26*(7).

Whitford, E. 2020. Can public college systems stave off closures? *Inside Higher Ed,* April 22, https://www.insidehighered.com/news/2020/04/22/financial-peril-prompting-calls-close-some-public-college-campuses-systems-can-often.

Zabadi, A. M. 2013. "Implementing total quality management (TQM) on the higher education institution—A conceptual model." *Journal of Finance & Economics*, 1(1), 42-60.

Zahneis, M., 2020. "Plexiglass? That'll be $135, please." *The Chronicle of Higher Education,* June 26, 66(32) 6.

Zwickel, S. (2020). "U-M Flint cuts 41% of lecturers, citing dire financial outlook. "*Detroit Free Press,* Published 6:00 am, June 22. https://www.freep.com/story/news/local/michigan/2020/06/22/um-flint-layoffs-lecturers-leo-michigan/3232929001/

CHRONICLE OF LEADERSHIP AND MANAGEMENT

December 2020
Volume 1, Number 1

BALDRIGE INSTITUTE FOR PERFORMANCE EXCELLENCE
1717 Pennsylvania Avenue, NW, Suite 1025
Washington, DC 20006

CHRONICLE OF LEADERSHIP AND MANAGEMENT

Publisher: Foundation for the Malcolm Baldrige National Quality Award, Inc.
Editor-in-Chief: James R. Evans, Professor Emeritus, Lindner College of Business, University of Cincinnati
Assistant Editor: Kay Kendall, MBA, CPHQ, BaldrigeCoach®
Production Editor: Mark Wayda, Ph.D.

1717 Pennsylvania Avenue, NW
Suite 1025
Washington, DC 20006
Phone: 202-559-9195
Website: www.baldrigeinstitute.org/research
Email: chronicle@baldrigefoundation.org

The Baldrige Foundation's Institute for Performance Excellence is a thought leader on performance excellence, leadership, and management. It carries out this mission in a number of ways, including undertaking research projects, hosting conferences and activities, conducting executive-level training, and publishing and distributing a wide variety of educational materials. Its mission is to improve the practice of leadership and management in pursuit of performance excellence and its impact in an ever-changing world.

Contributors

The Guidelines for Authors may be found printed at the end of this volume. Alternatively, you may request the standard contributors' guidance from the editor at chronicle@baldrigefoundation.org or access it online at baldrigefoundation.org/what-we-do/thought-leadership/ before submitting manuscripts. The *Chronicle of Leadership and Management* neither offers nor makes compensation for articles or perspectives, and it assumes no responsibility for the return of manuscripts, although every effort is made to return those not accepted. In submitting work the sender warrants that it is original, that it is the sender's property, and that neither it nor a similar work by the sender has been accepted or is under consideration elsewhere.

ISSN 2765-8570 (Print)
ISSN 2765-8597 (Online)


Malcolm Baldrige
National Quality Award

CONTENTS

FROM THE EDITOR-IN-CHIEF

The *Chronicle of Leadership and Management* is published by the Baldrige Foundation through its Institute for Performance Excellence. I am very pleased and honored to have been asked by Al Faber, President and CEO of the Baldrige Foundation, to develop and edit the *Chronicle*. During my former academic career, I had published numerous research papers relating to the Baldrige Criteria, served as Editor of *The Quality Management Journal* for the American Society for Quality, and served as an Examiner, Senior Examiner, and Judge for the Baldrige Program. Members of the Editorial Board have extensive experience and knowledge about high-performance management approaches, the Baldrige program, and the Baldrige Excellence Framework, and I am happy that they have volunteered to assist in reviewing submissions and developing the *Chronicle*.

The goal of the *Chronicle of Leadership and Management* is to facilitate sharing of knowledge by providing insightful and practical perspectives for leading and managing performance excellence in business, health care, education, government, nonprofit organizations, and in communities and cybersecurity applications.

The *Chronicle* consists of **Feature Articles,** intended to provide original and useful information of interest and practical significance to organizational leaders, which are grounded in experience, innovative thought, and appropriate literature research. Executive summaries of feature articles are provided as brief overviews of these articles to assist readers. **Leadership and Management Perspectives** provide specific points of view designed to support understanding or to provide insights about current issues, emerging issues, Baldrige challenges, implementation strategies, best practices, and similar topics. Please refer to the Guidelines for Authors printed at the end of this volume.

In this issue, we have three Feature Articles and three Leadership and Management Perspectives.

Feature Articles

- *Contemporary Challenges Confronting Colleges and Universities: The Baldrige and*

Excellence in Higher Education Approach to Institutional Renewal by Brent D. Ruben explores ways in which the core concepts of the Malcolm Baldrige framework can be a useful guide to U.S. higher education institutions as they confront disruptive challenges to their core purposes, operational practices, and long-term stability in the wake of the existential crisis brought about by the COVID-19 pandemic.

- *The Intelligent Risk Equation: When Opportunities Outweigh Threats* by Daryl V. Watkins and Valerie P. Denney examines the concept of positive risk as opportunity through a case study of a hypothetical university. The article maps the examples presented in the case study to key Baldrige terms to illustrate the systems nature of intelligent risk management.
- *Usefulness of Baldrige Self-Assessments* by Michele Trimby Hoppenrath explores the use of self-assessment tools in determining the potential score of a Malcolm Baldrige National Quality Award application. The article provides an overview of self-assessment approaches and the results of a research study to evaluate how well one tool can predict criteria scores.

Leadership and Management Perspectives

- *Leveraging the Genetics of Leadership: Cracking the Code of Sustainable Performance* by Daniel B. Edds addresses reasons why contemporary approaches to leadership are failing to impact organizational performance and may in fact be undermining organizational performance.
- *Positive Change Leadership: Why A New Leadership Paradigm is Necessary Today* by Sherry Bright, Anne-Claire France, Read G. Pierce, and Gene Beyt proposes key leadership principles and behaviors that can assist organizations that struggle in these turbulent times.
- *Transforming Today's Medical Device/Pharmaceutical Industry Utilizing the Baldrige Excellence Framework* by Gregory Matz and Christopher Czyzewski focuses on the importance and the role of Baldrige in the medical device and pharmaceutical industries to drive transformation beyond regulatory compliance. Their approach can provide insights across industries and sectors.

Please feel free to contact me with any questions or comments.

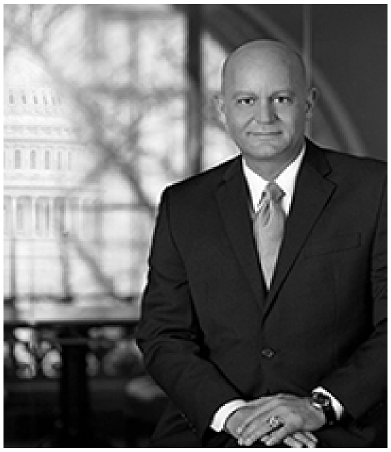
James R. Evans
Professor Emeritus
Lindner College of Business
University of Cincinnati
chronicle@baldrigefoundation.org

In 2014, Al Faber was named President and CEO of the Baldrige Foundation. The Mission of the Baldrige Foundation is to ensure the long-term financial growth and viability of the Baldrige Performance Excellence Program, and to support organizational performance excellence in the United States and throughout the world.

Prior to joining the Foundation, Al served as President & CEO of The Partnership for Excellence (TPE), the premier Baldrige-based state program for the promotion of performance excellence in all sectors of the economy. As of 2014, TPE had served more than 324 organizations that represent more than 1.7 million jobs at 1,769 work locations with revenues in excess of $139.2 billion and more than 226.4 million customers.

Al also served in federal and state government culminating in executive positions and leading more than 11,500 employees, with 65 major facilities, a $250 million operating budget, and real property exceeding $2.1 billion.

He has provided executive leadership, establishing policies, priorities, and oversight of federal budgets, operations and training, personnel, logistical operations, and infrastructure management to include numerous construction programs. He is driven to create winning organizational results with a deep sense of commitment to public service. He led his teams to two consecutive national awards in the Army Communities of Excellence competition using the Baldrige Criteria and also achieved both "Silver" and "Gold" status in The Partnership for Excellence State Program. Al has led department-wide organizational restructuring initiatives to meet the demand for greater efficiency and process optimization, while institutionalizing Lean Six Sigma, Balanced Scorecards, Strategy Maps, and numerous supporting professional development programs.



PRESIDENT AND CEO FORUM

"That ideas should freely spread from one to another over the globe, for the moral and mutual instruction of man, and improvement of his condition, seems to have been peculiarly and benevolently designed by nature."

—Thomas Jefferson, Letter to Isaac McPherson, August 13, 1813

On behalf of the Baldrige Foundation's Board of Directors, it is a privilege to introduce the inaugural issue of the *Chronicle of Leadership and Management®* published by the Baldrige Foundation's Institute for Performance Excellence. I would like to thank Dr. James Evans for volunteering to serve as the Chronicle's first editor-in-chief. Dr. Evans is a nationally respected leader, author, and academician. We are grateful for his volunteer spirit in heading up this project. I also want to thank our editorial board for reviewing the numerous submissions we received. Dr. Evans has gathered a diverse group of stellar authors and Baldrige experts to assist him in determining the best articles to showcase in the *Chronicle*.

If Baldrige is to remain relevant and grow in its use, additional thought leadership in the domains of leadership and management will be required to inspire its application in every sector of the economy. The intent of Congress when establishing the Baldrige Program was to identify and recognize national role-models who would share their best practices to accelerate learning and high performance across the nation to drive American competitiveness in a global economy. For more than three decades the Baldrige Program has fulfilled that mission. The Baldrige Foundation's Institute for Performance Excellence was created to complement and leverage that success, and launch a fresh, new commitment to performance excellence. This will be accomplished by undertaking research projects, hosting conferences and activities, and by conducting executive-level and online professional development and skills training. Additionally, the Institute will provide valuable resources to enhance organizational performance and publish a variety of educational materials to share best practices.

As part of our collection of resources, the *Chronicle* will afford leaders and managers with in-depth articles into subjects that will help them think about what “can be” within their own organizations, and shorter, more practical articles with perspectives on contemporary ideas and current events. Even for those who are not using the Baldrige Framework, this publication will strive to become a valuable addition to your personal leadership and management library.

As we look to future issues, expect the journal to evolve. We hope to publish content that serves as the starting point for ongoing conversations among authors and our readers. We will employ strategies to obtain reader feedback and plan to host forums on topics addressed. We seek to engage both practitioner and scholarly communities. This process is central to the Institute’s purpose: helping people and organizations learn and grow in the pursuit of performance excellence. The Institute does not view particular ideas presented as absolute or exclusive of others. Our goal is to provide a creative spark to help foster engaging dialogue that ultimately leads to innovation and improved organizational results, growth, and sustainability.

In closing, I want to sincerely thank the Baldrige family, Midge, Molly, and Megan, as well as the Institute’s first Trustees who form the Mac Baldrige Society, Adventist Health, Stellar Solutions, and MidwayUSA. Their generous gifts have made the Institute a reality.

As President Ronald Reagan once said of Secretary Baldrige, “I always prized the quality of Mac’s vision. He had the capacity to look up from the dust of the plains to see the distant mountains.” It is that eternal optimism embodied in Mac’s personal leadership style that serves as his legacy and our inspiration for the future of Baldrige.

Wishing you all the best!

Al Faber
President and CEO

FEATURE ARTICLES

Executive Summaries

Ruben: Contemporary Challenges

Contemporary Challenges Confronting Colleges and Universities: The Baldrige and Excellence in Higher Education Approach to Institutional Renewal by Brent D. Ruben focuses on how Baldrige-oriented thinking can be helpful to colleges and universities in their efforts to address the contemporary challenges they confront in the wake of COVID-19, recognizing that this difficult moment in time may also offer opportunities for constructive transformational change.

The article introduces the Excellence in Higher Education-Renewal (EHE-R) framework, developed to assist colleges and universities in post-crisis review, strategy formulation, and renewal planning. The EHE-R framework represents an extension of the general Excellence in Higher Education (EHE) model developed to adapt the Baldrige framework to align with the language and culture of higher education. Key questions in each of the following categories of the EHE-R framework are presented and discussed: (1) Leadership, (2) Purposes and Plans, (3) Beneficiary and Constituency Relationships, (4) Programs and Services, (5) Faculty/Staff and Workplace Issues, (6) Metrics, Assessment, and Analysis, and (7) Outcomes and Achievements.

The article also describes processes for using the EHE-R framework to guide leaders and colleagues in thoughtful and systematic review and forward planning at the institutional level, and within academic and professional schools or departments, as well as in administrative, student life, facilities, IT, human resources, athletics, and other functional areas. Finally, potential research needs and opportunities related to the application of Baldrige-oriented thinking in crisis settings within higher education are discussed, which may also be applicable to other economic sectors.

Watkins and Denney: Intelligent Risk

The *Baldrige Excellence Framework* contains several references to pursuing intelligent risks (Bailey, 2016). Nevertheless, many organizations do not systematically identify, assess, and pursue intelligent risks. *The Intelligent Risk Equation: When Opportunities Outweigh Threats* by Daryl V. Watkins and Valerie P. Denney examines the concept of positive risk as opportunity through a case study of a hypothetical university. The article maps the examples presented in the case study to key Baldrige terms to illustrate the systems nature of intelligent risk management.

This article makes the case that shifting the prevailing view of risk management to incorporate positive risks will help organizations that are pursuing performance excellence. Operational excellence will be short-lived if systems and processes cannot adapt and grow to meet future needs. Organizations that have committed to quality and performance excellence must develop systematic processes that incorporate intelligent risks into their leadership and operational systems to achieve long-term success.

The results of a recent study that explored risk management attitudes of experienced program, project, and risk managers are described, and several lessons that might help senior leaders emphasize and reinforce opportunity management as part of the organizational culture are discussed.

The article also presents potential tools used to gather data, analyze data, and imagine possibilities during opportunity identification, and demonstrates the application of these tools using the hypothetical university. Any organization committed to continuous improvement and innovation can adopt these tools and techniques; however, employees may need to broaden their mental models to include positive risk within their risk management thinking.

Finally, it is suggested that the context of COVID-19 will provide an excellent backdrop to look back and evaluate intelligent risk-management processes. It is better to enter a crisis with a robust intelligent risk management infrastructure in place than to have to deal with an existential crisis and also attempt to develop a new process. The authors use the Texas grocer H-E-B as an example of a company that is doing an exceptional job managing intelligent risks.

Hoppenrath: Usefulness of Baldrige

Usefulness of Baldrige Self-Assessments by Michele Trimby Hoppenrath explores the use of self-assessment tools in determining the potential score of a Malcolm Baldrige National Quality Award application to assist organizations in developing operational excellence. These tools can help determine the maturity of processes and identify areas that need improvement.

A study examined three types of self-assessment tools – written narratives, Likert-scale surveys, and behaviorally-anchored response surveys (BARS) – and ranked them according to ease of use, financial cost, time needed to complete, and availability. BARS was identified as the most useful approach. Three published tools in the BARS category were evaluated to identify the tool having the best alignment with the Baldrige Criteria. Denis Leonard's Baldrige Aligned Self-Assessment Matrix Table was identified as the best. This tool was used by Baldrige examiners along with the 2018 Green Gateway Baldrige case study to determine how well it can predict criteria scores in a formal Baldrige assessment. A statistical analysis of the data suggests that the Baldrige Aligned Self-Assessment Matrix Table can provide an accurate estimation of the score of a formal Baldrige assessment.

Dr. Brent D. Ruben is a Distinguished Professor of Communication, School of Communication and Information, Rutgers-New Brunswick, and University Director, Center for Organizational Development and Leadership.

The author gratefully acknowledges Joe Barone, Richard De Lisi, Phil Furmanski, Ralph Gigliotti, Rob Heffernan, Susan Lawrence, Laura Lawson, Barbara Lee, Gwen Mahon, Karen Novick, Bishr Omary, Jonathan Potter, Brian Strom, and Al Tallia for their helpful comments and suggestions regarding the EHE-R framework presented in this article, and Karen Verde and Jann Ruben for their much-appreciated editorial assistance.

Daryl V. Watkins is Associate Professor in the Department of Management and Technology, at Embry-Riddle Aeronautical University. Dr. Watkins is a tenured Associate Professor and serves as the Associate Dean of the College of Business. He is a Navy Combat Veteran with a background in aviation, transportation, and information technology. Dr. Watkins' expertise is in Organizational Leadership and Development. He developed many of the courses within the Master of Science in Leadership program.

Valerie P. Denney is an Assistant Professor in the Department of Decision Sciences at Embry-Riddle Aeronautical University. Dr. Denney teaches both the Bachelor and Master's degrees in Project Management (BSPM and MSPM). She is a member of the PMI Global Leadership team and part of the Ethics Member Advisory Group (EMAG), and on the Board of Directors for the International Center for Academic Integrity (ICAI).

THE INTELLIGENT RISK EQUATION

When Opportunities Outweigh Threats

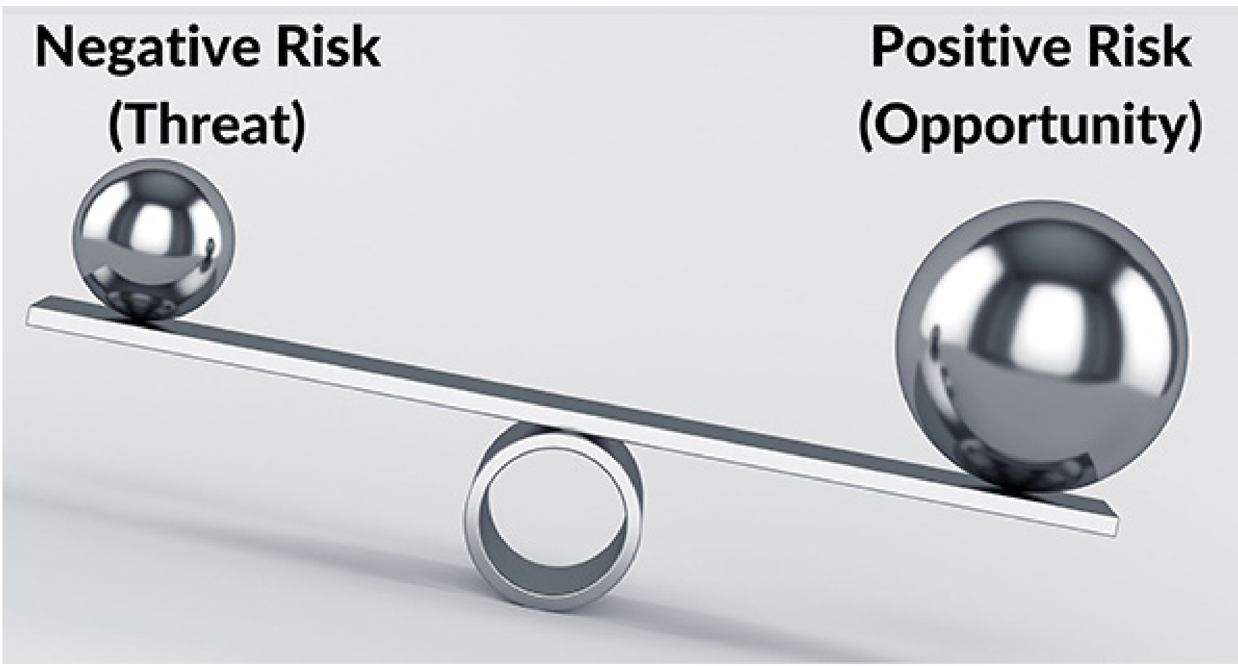
Daryl V. Watkins, Ph.D. and
Valerie P. Denney, Ph.D.

The idea of intelligent risks is not new. After all, most of us are familiar with the phrase, "No Risk, No Reward!" However, the phrase reinforces two fallacies: that risk and reward are separate constructs, and that the word *risk* implies only a potential for harm. For some reason, though, when asked to consider the concept of risk or assess risk, the mind goes to what can go wrong. People rarely think of the upside of risk. Risk is the potential for *harm* or *benefit* brought about by uncertainty. We do not know what will happen. Over time, as uncertainty resolves, a threat may lead to harm, an opportunity may lead to benefit. Identifying and actively working to address risk may help reduce uncertainty and tip the balance toward achieving the benefit. The Baldrige Excellence Framework (2019, 49) defines intelligent risk as "opportunities for which the potential gain outweighs the potential harm or loss to your organization's future success if you do not explore them." Figure 1 depicts the balance of positive and negative risk in the intelligent risk equation. Negative risks are threats that may harm the organization. Positive risks are opportunities that would provide a benefit to the organization if they come to fruition. With intelligent risks, positive risk outweighs negative risk.

Focusing on the downside of risk creates problems for organizations because they may invest too many resources in mitigating threats while ignoring opportunities. High-performing organizations take advantage of strategic opportunities to respond to environmental and competitive changes. McEachran (Bailey, 2016) argued that considering risk from a positive light helps people develop a tolerance for embracing risk to innovate towards their most critical priorities. Even experienced employees with broad responsibilities across organizations fail to consider intelligent risks. A recent study, (Denney, 2020), reported that fewer than 20 percent of experienced project and risk managers reported that their organizations considered risk through a positive lens. Close to 90 percent identified a lack of funding to pursue opportunities. These project managers and their organizations seem to have erected a conceptual firewall between their mental models of threats and opportunities. We suggest that organizations can benefit from eliminating that firewall by reframing risk in alignment with the Baldrige Excellence Framework view of intelligent risks.

The Baldrige Excellence Framework asks about intelligent risks in five of the seven categories (Baldrige Performance Excellence Program, 2019). For example, in the Leadership Category, Item 1.1 asks how senior leaders cultivate an environment of intelligent risk taking. The note for 1.1c(1) suggests that leaders should think about their organizations' tolerance and appetite for risk, specifically considering the threats and opportunities related to emerging technologies, integrating and securing data and information, safety, and the environment.

Figure 1 Intelligent Risk: The Potential Gain Outweighs the Potential Harm



Item 2.1 in the Strategy Category asks about the processes the organization uses to determine which strategic objectives to pursue as intelligent risks. Concerning the Workforce Category, Item 5.2 asks how the workforce management systems reinforces intelligent risk taking. This idea is reinforced in the core values and concepts under *valuing people*. Within the Operations Category, Item 6.1 suggests that the approaches for pursuing strategic opportunities deemed as intelligent risks are part of innovation management. This is also reinforced within the core concepts under *managing for innovation*. Finally, the Results Category asks Baldrige applicants to provide their results for taking intelligent risks in Item 7.5.

Each organization operates within the context of its industry, resources, size, and other factors that affect how senior leaders view risk. The point is not to prescribe what leaders should do, but to ensure that they are building intelligent risk-taking into their culture, processes, and results. This means that organizations need to build a tolerance for failure; pursuing intelligent risks does not always work out. A culture of intelligent risk-taking allows employees the freedom to pursue intelligent risks without the fear of being fired, demoted, or reassigned. Of course, those failures should be accompanied by robust organizational learning that attempts to diagnose if signs were missed along the way.

Some sectors and industries tend to be more risk adverse due to the nature of the threats (e.g., financial services, public health, pharmaceuticals, automobile manufacturing, aerospace, and aviation). Breakdowns in these industries can cause loss of fortune and/or lives. Therefore, organizations within these sectors and industries often have more robust processes to ensure effective mitigation or negation of threats. For example, an automaker might decide that an intelligent risk related to a more efficient tire design is not worth the potential loss of life that might occur due to the small risk of a high-speed blowout. Thus, it should be clear that an organization need not automatically "take" an intelligent risk because it assesses that the positive outweighs the negative. The decision to pursue an intelligent risk is value-laden and might rely on organizational values, thoughtful analysis, risk tolerance, projected financial outcomes, previous (especially recent) failures, and additional considerations.

Potential Loss or Harm – A Prevailing View of Risk

Benjamin (Benjamin, 2017, 27) described enterprise risk and opportunity management as "the methods and processes used by organizations to manage risks and seize opportunities related to the achievement of their objectives." That definition is consistent with the prevailing view that risk and opportunity are loosely related. Most people actively quantify risks from the standpoint of potential loss rather than a potential for loss *and gain* (Denney, 2020; Funston, Wagner, and Ristuccia, 2010). That narrow perspective creates missed opportunities for innovation and growth. The experiences of project and risk managers provide a window into the problems faced by organizations. Both project and risk managers deal with issues and opportunities across the range of organizational functions. Both groups are usually trained in specialized techniques to collect and analyze conflicting information, to communicate at multiple organizational levels, and to seek wide-ranging perspectives.

A recent study, (Denney, 2020), sampled 63 experienced program, project, and risk managers to discover whether they and their organizations viewed risk from an opportunity frame and to expose underlying biases between threat and opportunity management. This study consisted of four parts: (a) opportunity identification; (b) stage identification; (c) funding sources; and, (d) participant and tool identification. In part one, the participants described one or more examples of specific opportunities identified within their projects. Only 38 percent were able to cite a specific example, and 17 percent admitted they had not seen a good example of opportunity identification. These senior practitioners pointed to four reasons they could not recall specific opportunities.

First, many were inexperienced or lacked training in identifying opportunities. Second, in some cases, they reported that the organizational culture did not place enough emphasis on continuous improvement and opportunity management. Third, overwhelmingly, they were too busy with day-to-day operations to recognize and take advantage of opportunities. Finally, opportunities were not emphasized until senior leadership needed a recovery option.

In part two, participants described the project or program stages where their organizations consider opportunities. The project managers identified opportunities at the proposal stage of projects, if at all. Most reported that they did not continue to scan for opportunities beyond the early stages of the project life cycle. These experienced project and risk managers operated in an ad hoc manner, not thinking of opportunity identification as a continuous, iterative process (Denney, 2020).

In part three, participants described funding practices for opportunity management in comparison to threat management. Nearly 50 percent of the participants commented on how opportunities are *not* funded, instead of how they *are* funded. About 25 percent reported that organizations fund opportunities on a case-by-case basis and only after a rigorous business case. Business cases were not required for addressing threats. None of the participants reported that their organizations had systematic and repeatable processes to manage opportunities within their projects (Denney, 2020).

In part four of the survey, participants described who is involved in identifying opportunities and what tools and techniques they use for opportunity identification. Participants reported that subject matter experts, project members, risk board members, and other individuals who are closest to the project are typically involved in opportunity identification. Some participants reported using outside experts and processes (e.g., Lean, Six Sigma) to bring fresh perspectives and skills that were not available internally. The participants reported that their organizations used common management tools such as checklists, prompt lists, and SWOT analysis to aid in opportunity identification.

Suggestions for Practice

The study pointed to a need for change from the top. Senior leaders can emphasize and reinforce opportunity management as part of the organizational culture. Organizations benefit from creating systematic processes for opportunity management and deploying those processes throughout the organization. Ideally, managers would fund those processes during the budgeting cycle, including training for employees who are involved in the processes and seed money for pursuing intelligent risks (i.e., exploiting opportunities). Systematic processes might reduce the feeling of overwhelm felt by many managers who need time to think and to allow opportunities to percolate. Finally, it may take a village to bring opportunities to fruition. Leaders should encourage opportunities for diverse sets of employees to come together to identify opportunities. Leaders should also consider including outside experts, where useful, as they may be more familiar with an arsenal of tools and techniques than internal practitioners.

Intelligent risk management can consist of sophisticated processes and tools. However, it need not be complicated to be effective. Any organization committed to continuous improvement and innovation can adopt the tools and techniques referenced in the remainder of this document. Employees may need to broaden their mental models to include the concept of opportunity as positive risk. That recognition alone would enable more people to take advantage of the wealth of tools and techniques for identifying and managing intelligent risks. The assumption here is that employees have used many of these tools in other contexts (outside of positive risk identification). They can repurpose the tools and techniques for opportunity management.

Within the Baldrige Excellence Framework, the idea of intelligent risks ties closely with strategic opportunities and innovation (Baldrige Performance Excellence Program, 2019). Here we are talking about opportunities that are important to the organization, not tactical or logistical decisions like switching to a lower-cost or more reliable supplier to decrease costs or cycle time. Strategic opportunities have the potential to provide breakthrough improvements to the organization in alignment with strategic objectives. A well-integrated organization has mature processes to identify strategic opportunities, determine whether those opportunities represent intelligent risks, and create discontinuous improvements through innovation.

We emphasize the systems nature of choices that the organization makes about intelligent risks because these risks should tie clearly back to the organizational mission, vision, and values. It can be difficult to conceptualize these ideas without a tangible example to describe these concepts. So, we have constructed a hypothetical example to consider how an organization might place intelligent risks within its leadership and operating systems.

A Hypothetical Example

Imagine a hypothetical university, HHEI, that uses the Baldrige Excellence Framework. Like most educational institutions, our hypothetical university has a vision of contributing to society by advancing the knowledge of students and conducting ground-breaking research. The university's mission is to educate students and future leaders to transform society. The university values students, academic freedom, collaboration, integrity, excellence, and inclusion.

HHEI's strategic advantages are a world-class faculty, proximity to a large metropolitan center, and a large and active alumni group. World-class faculty are an advantage because they typically have exceptional credentials, can generate grants, and their reputations can draw students into the university. The proximity to a large metropolitan center creates a large market of progressively minded college-aged students, potential industry partners, and an attractive environment for students and faculty. The large and active alumni group offers a strategic advantage because there are many prospects for donations, service, internships, jobs, and advice.

On the other hand, HHEI has strategic challenges of a small endowment, a disproportionately large enrollment of military personnel and international students, and sensitivity to a government shutdown and public policy decisions. The small endowment is a strategic challenge because it means that the university must rely on tuition, grants, and federal funding. The large enrollment of military personnel is a challenge because military student enrollment is subject to military change orders, deployments, and operations tempo. Likewise, international students are subject to numerous processes and regulations for enrollment and record-keeping. Finally, the sensitivity to a government shutdown and public policy decisions creates a strategic disadvantage because enrollments and registrations slow during sequestration or reductions in foreign visas.

After reviewing strategic advantages and challenges, HHEI selects a few strategic objectives: (a) develop an online presence; (b) reduce reliance on tuition revenues from military and foreign national students; and (c) become more resilient in the face of operational disruptions. These objectives would enable HHEI to exploit their advantages and begin to address their challenges.

HHEI must assess strategic opportunities to decide how to go about achieving their strategic objectives. HHEI believes that building online capability and capacity represents a strategic opportunity. However, they must go through a learning process of discovery related to developing an online presence. For example, they need to understand the potential costs of developing the infrastructure to deliver online courses. During their discovery, they learn that numerous processes and systems must change to facilitate online learning. For example, the faculty will need training because most do not have experience teaching online. The university may need to invest in course designers to help create compelling content. HHEI might need to replace its learning management system. On the other hand, some private, for-profit universities have already built out the infrastructure and have well-developed online processes. However, many of these for-profit universities suffer from negative public perceptions.

HHEI assesses that partnering with or purchasing one of these private universities is also a strategic opportunity. They must consider both the positive and negative sides of whether to pursue developing an internal online presence or pursuing the partnership path.

The HHEI example used key terms that appear regularly through the *Baldrige Excellence Framework* (NIST, 2019). To help organizations gain a common understanding of important concepts, Baldrige defines key terms used within the framework. These terms might have a different meaning to people depending on their industry, role, specialization, and familiarity with Baldrige terminology. Table 1 describes key Baldrige terms introduced in the hypothetical discussion on HHEI. The mapping illustrates the coherence of the framework with regard to intelligent risks and innovation.

Table 1 Baldrige Excellence Framework Definitions of Key Terms Mapped to the HHEI Example

Baldrige Term	*Definition from Glossary of Key Terms (pp. 46-52)*	*Hypothetical Example HHEI*
Key	Major or most important; critical to achieving your intended outcome.	• key processes such as enrollment and records management
Mission	Your organization's overall function.	• educate students and future leaders to transform society
Vision	Your organization's desired future state.	• contributing to society by advancing the knowledge of students and conducting ground-breaking research
Values	The guiding principles and behaviors that embody how your organization and its people are expected to operate.	• students, academic freedom, collaboration, integrity, excellence, and inclusion
Strategic Advantages	Those marketplace benefits that exert a decisive influence on your organization's likelihood of future success.	• world-class faculty • proximity to a large metropolitan center • large and active alumni group
Strategic Challenges	Those pressures that exert a decisive influence on your organization's likelihood of future success.	• small endowment • disproportionately large enrollment of military personnel and international students • sensitivity to a government shutdown and public policy decisions
Strategic Objectives	The aims or responses that your organization articulates to address major change or improvement, competitiveness or social issues, and business advantages.	• develop an online presence • reduce reliance on military and foreign national tuition • develop resiliency in the face of operational disruptions
Strategic Opportunities	Prospects for new or changed products, services, processes, business models (including strategic alliances), or markets.	• develop an internal online capability • acquire or merge with school with a large online presence • diversify student population • implement new development office for fundraising
Intelligent Risks	Opportunities for which the potential gain outweighs the potential harm or loss to your organization's future success if you do not explore them.	• develop an internal online capability • implement new development office for fundraising

Innovation	Making meaningful change to improve products, processes, or organizational effectiveness and create new value for stakeholders.	• transition traditional classroom-based course to the online environment • create new processes for student and faculty interaction and engagement
Alignment	A state of consistency among plans, processes, information, resource decisions, workforce capability and capacity, actions, results, and analyses that support key organization-wide goals.	• strategic objectives flow from strategic advantages and challenges to support HHEI's goals • decision-making reflects consistency between planning, process improvement, workforce management in support of HHEI's objectives
Integration	The harmonization of plans, processes, information, resource decisions, workforce capability and capacity, actions, results, and analyses to support key organization-wide goals.	• all elements presented work together as a coherent system to support HHEI goals

High-performing organizations develop well-defined processes that are effective and systematic. Those organizations consistently use those processes throughout the entire organization, including with, as applicable, their customers, suppliers, and other stakeholders. The organizations also systematically improve their processes through learning, innovation, and knowledge sharing. The best organizations have integrated key processes to support their goals and objectives. They develop metrics on what is essential, track how they are doing longitudinally, benchmark against other high-performing organizations, and integrate their results into their management processes. These practices are foundational to the Baldrige Excellence Framework scoring criteria of A-D-L-I (approach, deployment, learning, and integration) and Le-T-C-I (levels, trends, comparisons, and integration). HHEI exemplifies an organization that has adopted the Baldrige Excellence Framework. HHEI determined strategic objectives and assessed strategic opportunities in a manner that was both consistent and harmonized with their mission, vision, and values. That consistency and harmony are indicative of alignment and integration.

As previously described, within the Baldrige Excellence Framework the concept of intelligent risks ties closely with strategic opportunities and innovation (Baldrige Performance Excellence Program, 2019). Organizations assess strategic opportunities to determine which are intelligent risks, especially those that might lead to breakthrough innovations. Thus, organizations that do not do an effective job of assessing risk within their strategic opportunities might miss out on breakthrough innovations. In the following section, we share tools and techniques used to gather data, analyze data, and imagine possibilities during opportunity identification.

Identifying Risks

We start from an assumption that many individuals have not thought of or are not familiar with tools and techniques they can use to manage intelligent risks. Thus, it might seem daunting to get started. We believe that readers will be familiar with most of the tools that we share below, although perhaps not in the context of opportunity identification. We base the following examples from one of the strategic opportunities listed for the fictitious university introduced earlier. While the actual analysis would be more detailed than described here, the example illustrates steps to examine HHEIs' strategic opportunities of *developing an internal online presence vs. acquiring or merging with a school with an existing online presence*.

Employees use data gathering tools to collect data to answer relevant questions about prospective opportunities. A list of data gathering tools is presented in Table 2.

Table 2 Data Gathering Tools and Techniques for Opportunity Identification

Name	Description
Checklists	Specific list of actions, behaviors, and environmental considerations to highlight past threats and opportunities. Draws on the expertise of past organizational activities to ensure consistency. (Chapman and Ward, 2011; Pritchard, 2015)
Prompt Lists	Predetermined categories to generate ideas. Common types include: PESTLE – political, economic, social, technological, legal, environmental; TECOP – technical, environmental, commercial, operational, political; VUCA – volatility, uncertainty, complexity, ambiguity; SPECTRUM – socio-cultural, political, economic, competitive, technology, regulatory/legal, uncertainty/risk, market. (Kendrick, 2015; PMI, 2017; PMI, 2019)
Retrospection	Organizational risk (positive and negative) history examination, including activities and how individuals worked to resolve those experiences. May include historical information, post-activity reviews, lessons learned, and best practices. (Hillson, 2019; Kendrick, 2015)
Risk Breakdown Structure (RBS)	A generic hierarchical framework to identify sources of risk (positive and negative). Groups risks into clusters for categorical analysis. (Hillson, 2019; PMI, 2019; Pritchard, 2015)
Taxonomies	A risk hierarchy which groups types of risks (positive and negative), ensuring broad coverage (Carr et al., 1993; Pritchard, 2015)

Some of the tools in the list would lend themselves to the current example, while others would not. For instance, checklists, retrospection, and taxonomies would not be particularly appropriate HHEI example since they rely on past experiences. HHEI seeks to develop a new capability; so, a prompt list, such as PESTLE, can be particularly useful in gathering positive and negative elements for each item. PESTLE is an acronym for political, economic, social, technological, legal, and environmental.

- Political – considerations include unique requirements for every student's state of residence, availability of state grants, and lobbying needs and relationships.
- Economic – considerations include costs associated with creating an online infrastructure, offsets for having a distributed faculty with less need for office space, and additional grants and tuition
- Social – considerations include changed student experience of campus life, ethical concerns over potential for cheating, faculty and administrative buy-in
- Technological – considerations might include bandwidth, cybersecurity, network resiliency, and implementing new software and hardware.
- Legal – considerations include student rights in an online environment and human resource requirements.
- Environmental – considerations include positive environmental impacts of reduced campus footprint, less traffic around campus, and less food waste in the campus cafeteria.

The data-gathering tools generate lists of opportunities and threats that need to be further analyzed using data-analysis tools. Data-analysis tools generate deep insights about the opportunities and threats that are fed into the intelligent risk equation. Table 3 describes common tools used for data analysis. As with the data-gathering step, some of the tools or techniques would not work for the HHEI example. These strategic opportunities are not due to a prior failure; therefore, root cause analysis and failure model analyses would not be useful. We begin with document analysis. The PESTLE analysis identified regulatory requirements as a concern. Through document analysis, details of online accreditation requirements could be ascertained. Another useful tool would be influence diagrams to generate a graphical representation of the decision process. Here, the decision process includes evaluating the potential harm and benefits associated with developing an internal online capability vs. acquiring a school with a significant online presence. The diagram would include all internal and external variables, events, outcomes, consequences, and payoffs relative to this decision. Variables should include quantified values and uncertainty associated with each to provide the most utility for decision-makers. As with the PESTLE application, data-analysis tools need to account for positive and negative elements.

Data-gathering and data-analysis tools uncover elements that are known. Sometimes, we need to think about risk from a place of imagination and discovery. The imagining tools from Table 4 are used to explore novel concepts to generate lists of what could be. For our example, a multi-faceted approach works best. Assuming that HHEI has little experience with online teaching, the university might use questionnaires, surveys, or interviews to seek expert input from external consultants. Open-ended questions about the future would guide the imagining process. "Imagine that in four years, we are a top university delivering online education. What does that look like"?

"How do we get there?" would be used to extract comments about developing an online capability vs. acquiring one. Those methods could be followed up with the Delphi method. Facilitators would guide domain knowledge experts through an interactive process of questioning, discussing, and honing their thoughts on the best practices to develop the desired capabilities.

The previous analysis teased out HHEI's strategic opportunities related to developing an internal online presence. Going through defined processes enabled the organization to consider both the positive and negative risks systematically. Here, HHEI used several of the risk identification tools to uncover opportunities that would otherwise remain buried in someone's head or, worse, be exploited by a competitor.

Table 3 Data Analysis Tools and Techniques for Opportunity Identification

Name	Description
Assumptions/ Constraints Analysis	Examining the validity of challenges, assumptions, and expectations. (Hillson, 2019; Kendrick, 2015; PMI, 2019, Pritchard, 2015)
Document Analysis	Analyzing and parsing documents to identify assumptions, concerns, or generalizations that were not flagged in the requirements or procedural documentation. Develops insight through inference. (Pritchard, 2015)
Failure Mode Analysis	A model structured to identify various elements that can cause system failures. Variations include: FMEA – Failure Mode Effects Analysis FMECA – Failure Model Effect and Criticality Analysis Fault Tree Analysis. (Hopkin, 2017; PMI, 2019; Sankey & Chapelle, 2016)
Influence Diagrams	A type of causes and effects and cognitive mapping. Showing feedback and forward-loop effects, as opposed to the single path shown in a tree diagram. (Chapman & Ward, 2011; Hillson, 2019)
Root Cause Analysis	Progressively examining the underlying reasons for risk until arriving at the most basic level. Includes Ishikawa or fishbone diagram. (Kendrick, 2015; Pritchard, 2015; Sankey & Chapelle, 2016)
SWOT Analysis	Identifies specific cultural, organizational, and environmental issues that could have a positive or negative impact on the organization. Opportunities derive from strengths and threats derive from weaknesses. (Hillson, 2019; Hopkin, 2017; PMI, 2019, Pritchard, 2015)
Value Stream Mapping	A lean management tool and business mapping method that helps visualize the steps from product creation to delivery. (Womack & Jones, 1996)

After going through defined processes to weigh the potential benefits and harm of each opportunity, HHEI decided that developing an internal online presence is better in keeping with their mission, vision, and values. Partnering with or purchasing an online private university might devalue the strategic advantage of world-class faculty, exacerbate the strategic challenge of sensitivity to public policy decisions, and challenge the value of excellence. Thus, HHEI determined that pursuing a partnership is not an intelligent risk worth pursuing. The potential harm outweighs the benefits. The partnership, while innovative in terms of novelty, was not a better choice because of the potential harm to the organization (Hertz, 2018). However, developing internal capabilities to move online is considered an intelligent risk.

Table 4 Imagining Tools and Techniques for Opportunity Identification

Name	Description
Brainstorming	A facilitated technique to generate ideas and insight, encouraging participation without criticism or commentary. (Kendrick, 2015; Pritchard, 2015)
Crawfird Slip Method	A facilitated, iterative technique that establishes a clear premise by collecting responses on pieces of paper and repeating the process ten times to extract all the information available. This avoids groupthink. (Pritchard, 2015))
Delphi Technique	An iterative, asynchronous, idea generation or clarification technique taking advantage of expert insight. (Kendrick, 2015; Pritchard, 2015)
Expert Judgment and Interviews	One-on-one exchanges with individuals having significant expertise to obtain accurate judgment. (PMI, 2017; PMI, 2019, Pritchard, 2015)
Force Field Analysis	Uses an environmental scan to determine the external forces impeding achieving the desired state. (Hillson, 2019; PMI, 2019)
Questionnaire/ Surveys	Similar to interviews, but in written form and to a broader audience. (Kendrick, 2015)
Residual Impact Analysis	Assesses potential impacts which remain following risk mitigation activities. (PMI, 2019)

Excellence in Action

Considering intelligent risks for a hypothetical organization is an academic exercise. Applying these concepts in the real world may not be so simple. The context of COVID-19 will provide an excellent backdrop to look back and evaluate intelligent risk-management processes. Few organizations and pundits predicted a global pandemic would shake the world. Fewer still had processes in place that protected the organizations from the fallout. Just as the Great Recession of 2007-2009 birthed Uber, Pinterest, Square, and a host of Internet 2.0 companies, COVID-19 may provide fertile ground for innovation and discontinuous improvements (Wilson, 2020). We already see innovations in health care, government, education, technology, and politics (Chesbrough, 2020). However, many organizations are still sitting on the sidelines, developing a patchwork of responses, or they are desperately trying to catch up in an innovation game they were not prepared for and for which they did not understand the rules. It is better to enter a crisis with a robust intelligent risk management infrastructure in place than to have to deal with an existential crisis and also attempt to develop a new process.

Consider the well-known failures of Eastman Kodak and Blockbuster to innovate in response to discontinuous changes within their industries. Both companies held positions of industry leadership and had the time and opportunity to develop viable strategies to address industry disruption. Instead, they viewed the necessary investments as too risky (Hobbs, 2017; Wang, Chen, and Jaume, 2016). Each company threw good money after bad, continuing to invest in failed strategies. Each had the opportunity to acquire or develop the companies and technologies that are now leading their respective industries.

The Texas grocery chain, H-E-B, provides a stark contrast. The grocer developed its first pandemic and influenza plan in 2005 and has been refining the process ever since (Solomon & Forbes, 2020). As a result of that foresight, H-E-B was actively communicating with Chinese grocers in January of 2020 and started executing their pandemic response in early February, several weeks before President Trump's March 11 prime-time address to the nation in which he detailed the national response to the virus.

Experts are hailing H-E-B's pandemic response as an exemplar for preparation, but it was not just the pandemic planning that enabled that success. Faced with increasing pressure from Amazon's purchase of Whole Foods in 2017, H-E-B moved aggressively into information technology by establishing a digital hub in Austin, Texas, to accelerate its investment in digital technologies (Hawkins, 2019). As a result, H-E-B innovated customer offerings to include curbside pickup, grocery delivery, and online ordering. Those innovative services proved essential in positioning H-E-B to respond successfully to COVID-19. While other grocers were deciding how to respond, H-E-B was leading the way and developing even more trust with their employees and customers. H-E-B is the largest private employer in Texas. There are many people in Texas who can be thankful that H-E-B has aggressively improved its processes for innovation and managing intelligent risk.

Conclusion

Achieving operational excellence is not good enough if systems and processes cannot adapt and grow to meet future needs. Organizations that have committed to quality and performance excellence benefit from systematic processes that incorporate intelligent risks into their leadership and operational systems. These processes may be evident in terms of how the organization stimulates and incorporates innovation, allocates resources, rapidly modifies action plans, identifies new products and services, develops priorities for continuous improvement, embeds learning into operational process, prepares its workforce for changing capability and capacity needs, and reinforces intelligent risk-taking.

We have made a case that organizations should commit to incorporating positive risk into their risk management processes. Furthermore, we provide suggestions for how senior leaders can begin to change the culture of risk management by deploying systematic processes for opportunity management, funding employee development, and seeding the pursuit of intelligent risks. We suggest that leaders encourage occasions for diverse sets of employees and outside experts to come together to identify opportunities. We have also provided a list of tools, techniques, and examples for how to use these in risk identification.

Key Takeaways

- Organizations should expand their definition of risk to intelligent risk, including the idea of positive risk as opportunity. Look proactively at the potential for innovation and disruption.
- Organizations need to train and educate their employees to broaden their mental models to include the concept of positive risk. Adopt a culture and mindset of looking at every risk to discover both threats and opportunities.
- Senior leaders should emphasize and reinforce opportunity management as part of the organizational culture. Leaders need to create systematic processes for opportunity management and deploy those processes through projects, programs, products, and services life cycles.
- Organizations must set aside funds to pursue intelligent risks and to train employees to identify, assess, and pursue intelligent risks.
- Systematic processes might also help to reduce the feeling that many managers have that they are chasing their tails. They need time to think, to allow opportunities to percolate.
- Leaders should encourage opportunities for diverse sets of employees to come together to identify opportunities. Leaders should also consider including outside experts, where useful, as they may be more familiar with an arsenal of tools and techniques than internal practitioners.

References

Bailey, D. 2016. “A guide for when to embrace risk for value. “*Blogrige: The Official Baldrige Blog*. https://www.nist.gov/blogs/blogrige/guide-when-embrace-risk-value. September 29.

Benjamin, A. 2017. *Enterprise risk and opportunity management: Concepts and step-by-step examples for pioneering scientific and technical organizations*. Wiley.

Carr, M., Konda, S. Monarch, I. Walker, C., and F. C. Ulrich, 1993. *Taxonomy-based risk identification* (CMU/SEI-93-TR-006). http://resources.sei.cmu.edu/library/asset-view.cfm?AssetID=11847.

Chapman, C. & Ward, S. 2011. *How to manage project opportunity and risk: Why uncertainty management can be a much better approach than risk management* (3rd ed.). John Wiley & Sons.

Chesbrough, H. 2020. “To recover faster from COVID-19, open up: Managerial implications from an open innovation perspective.” *Industrial Marketing Management*. https://doi.org/10.1016/j.indmarman.2020.04.010

Corso, M. and L. Pellegrini, 2007. “Continuous and discontinuous innovation: Overcoming the innovator dilemma.” *Creativity and Innovation Management, 16*(4), 333-347. https://doi.org/10.1111/j.1467-8691.2007.00459.x

Denney, V. 2020. “Exploring the upside of risk in project management: A phenomenological inquiry.” *Journal of Modern Project Management. 8*(23), 279-300 https://doi.org/10.18255/JMPM02312

Funston, F., S. Wagner, and H. Ristuccia, H. 2010. “Risk intelligent decision-making: When risk is defined by an organization only as the failure to adequately protect existing assets and prevent loss, the rewards of reasoned, calculated risk taking are often neglected at potentially high to the company future success.” *China Staff, 16*(8), 58.

Hawkins, L. 2019. “H-E-B unveils Austin digital tech hub: Plans for 650 workers.” *Statesman News Network*. https://www.statesman.com/news/20190624/h-e-b-unveils-austin-digital-tech-hub-plans-for-650-workers

Hertz, H. 2018. “On innovation, intelligent risks, and leaking sinks.” *Blogrige: The Official Baldrige Blog*. https://www.nist.gov/blogs/blogrige/innovation-intelligent-risks-and-leaking-sinks-0. February 6

Hillson, D. 2019. *Capturing upside risk: Finding and managing opportunities in projects*. CRC Press.

Hobbs, T. 2017. “From iconic to punchline: Blockbuster’s CMO reflects on how things imploded.*” Marketing Week,* July. https://www.marketingweek.com/blockbusters-cmo-failure/

Hopkin, P. 2017. *Fundamentals of risk management: Understanding, evaluating and implementing effective risk management* (4th ed.). Kogan Page.

Kendrick, T. 2015. *Identifying and managing project risks* (3rd ed.) American Management Association.

NIST, 2019. *2019-2020 Baldrige excellence framework: Proven practices for high performance*. US Department of Commerce, National Institute of Standards and Technology. https://www.nist.gov/baldrige

O'Connor, G. C. 2008. Major innovation as a dynamic capability: A systems approach. *Journal of Product Innovation Management, 25*(4), 313-330. https://doi.org/10.1111/j.1540-5885.2008.00304.x

Pritchard, C. L. 2015. *Risk management concepts and guidance* (5th ed). CRC Press.

Project Management Institute [PMI]. 2019. *The Standard for Risk Management in Portfolios, Programs, and Projects*. PMI.

Project Management Institute [PMI]. 2017. *A Guide to the Project Management Body of Knowledge (PMBOK Guide)* 6th ed.. PMI.

Rasool, F., P. Koomsap,, B. Afsar, and A. P. Babrak. 2018. "A framework for disruptive innovation." *Foresight: The Journal of Futures Studies, Strategic Thinking and Policy, 20*(3), 252-270. https://doi.org/10.1108/FS-10-2017-0057

Sankey, E. and A. Chapelle, 2016. "Operational risk management." In D. Hillson (Ed.), *The risk management handbook: A practical guide to managing the multiple dimensions of risk* 50-71. Kogan Page.

Solomon, D. & Forbes, P. 2020. "Inside the story of how H-E-B planned for the pandemic." *Texas Monthly* March 26.. https://www.texasmonthly.com/food/heb-prepared-coronavirus-pandemic/.

Wang, J., Chen, Q., & Jaume, S. 2016. "Opportune paradigm shift: How an American technology image had been tarnished." *Journal of Management & Engineering Integration, 9(*1), 74-81.

Wilson, M. 2020. "14 successful companies that started during US recessions." *Business Insider*, April 20. https://www.businessinsider.com/successful-companies-started-during-past-us-recessions-2020-4

Womack, J. and D.T. Jones. 1993. *Lean thinking.* Simon & Schuster.

Michele Trimby Hoppenrath is the owner of Quality Systems Consultants in Somerset, Kentucky. Throughout her career, Michele has served in the Quality field, most recently as Senior Director of Quality Assurance, Corporate Quality, and Operations for Silliker/Mereiux NutriSciences. Prior to that she served as Director of Quality Assurance for Silliker, Inc., and as the Director of Quality for Nanophase Technologies.

USEFULLNESS OF BALDRIGE SELF-ASSESSMENTS

Michele Trimby Hoppenrath

Can using a self-assessment tool help predict the score of a Baldrige evaluation? We show, using a limited study conducted in 2019, that this is plausible. By comparing the results of a self-assessment tool to the 2018 Baldrige Green Gateway case study evaluated by a team of experienced, trained Baldrige Examiners™, we show that equivalent scores are attainable.

Self-Assessments

Self-assessments are defined as "a cyclic, comprehensive, systematic, and regular review of an organization's activities and results against a model of business excellence. . . culminating in planned improvement activities." (Van Der Wiele, T., Brown, A., Millen, R., & Whelan, D., 2000) Self-assessments help organizations determine where to start when moving from a compliance-based culture to an excellence-based culture to achieve a competitive advantage. The Baldrige Performance Excellence Program (National Institute of Standards and Technology, 2017) lists seven benefits of completing a self-assessment against the Performance Excellence criteria:

- Identify successes and opportunities for improvement
- Jump-start a change initiative
- Energize improvement initiatives
- Energize the workforce
- Focus your organization on common goals
- Assess performance against the competition
- Align resources with strategic objectives

These benefits reinforce the need for an effective assessment tool that is easy to use and aids organizations in their improvement journey. Improvement in quality, as articulated by the Baldrige

Excellence Framework (which includes the Criteria for Performance Excellence), is necessary for the efficient use of resources, customer satisfaction, and the survival of the organization.

Self-assessment tools are important because they help organizations determine their readiness for an application for the Baldrige Award. If an organization has not progressed to a level of maturity in addressing the criteria that would provide confidence to the company of receiving a high score when assessed by the examiner team, it could use the score from its self-assessment tool to concentrate the improvement efforts on low scoring areas of the criteria**.** Added advantages of low cost and a format that is easy to use by a selection of employees across the organization allow it to obtain a cross section of maturity and knowledge in the company. This can also improve the accuracy of the self-assessment and improve the organization's ability to rapidly keep track of progress in meeting the framework criteria. Without the aid of a self-assessment tool, organizations would most likely continue in their belief that the award is not motivating, too difficult to achieve, and takes too much time and resources to prepare.

Self-Assessment Approaches

Three categories of self-assessments applicable to the Malcolm Baldrige National Quality Award Performance Excellence Framework have been defined;

- Written narratives, which include self-analysis worksheets,
- Likert-scale surveys, and
- Behaviorally-anchored response surveys.

Each category has advantages and disadvantages for the organization seeking assistance in determining their readiness to apply for the Baldrige Award as described by Blazey and Grizzell in their book supplement "*Self-assessments of organizations and management systems"* (Blazey and Grizzell, 2017).

Written Narratives

Written narratives can be full length, the full fifty pages of an application, or shorter length written descriptions of the organization's progress against the Baldrige Excellence Framework. The full-length written narratives comprise organizations responding to all the categories in the criteria and describing, in narrative form, how the processes and programs meet or exceed the requirements. One technique is to have a single author or small implementation team write the entire narrative. Another technique is to have subject matter experts completing assigned sections. A management team then merges the section responses into a cohesive application. No matter how they are organized, these full-length written narrative self-assessments are the same as completing the application for submission.

Shorter length written narratives, which are usually less than twenty pages, include the *Baldrige Excellence Builder* (NIST 2019a). It includes 89 focused questions for an organization to answer that cover the seven categories. The questions ask "what" and "how" to prompt the organization to answer in a descriptive format. The questions ask the applicant to rate the organization's responses based on four maturity levels; Reactive, Early, Mature, or Role Model. The ratings are transformed into narrative statements that describe the level and provide objective evidence to support the level. Self-Analysis Worksheets (NIST 2019b) cover all the criteria categories and ask the organization to self-identify strengths and opportunities for improvement and to respond with goals to improve the processes or resolve the opportunities of improvement. The *Baldrige Excellence Builder* and the Self-Analysis Worksheets are both available on the Baldrige Performance Excellence Program website at https://www.nist.gov/baldrige.

Advantages of using written narratives include gaining experience in the writing of a Baldrige application, learning about the organization, and identifying strengths and opportunities for improvement. Disadvantages are the time and labor commitments, between 2,000 to 4,000 person hours, and the need for expert consultants to prepare, refine, and review the written narratives.

Likert Scale Surveys

The second category of self-assessments consists of surveys completed by the potential applicant that rates maturity with the criteria on a scale of the lowest level to the highest level at opposite ends of the scale. Likert scale surveys ask the subjects to respond to a set of statements that range from strongly disagree to strongly agree with the middle of the range indicating neither agree nor disagree. To develop consistency, some Likert-based surveys for the Malcolm Baldrige National Quality Award criteria have added descriptor words or phrases connected to the number scale.

These self-assessment tools include Baldrige surveys available and the Baldrige Express for Business, a survey provided through the Alliance for Performance Excellence, a nonprofit partner of the Baldrige Performance Excellence Program. These surveys use the traditional Likert-based scale of strongly disagree, disagree, undecided, agree, and strongly agree for responses and use a tick box format for response to the statements presented.

The NIST surveys are available free of charge on the Baldrige Performance Excellence Program website, https://www.nist.gov/baldrige/self-assessing/getting-started. The Baldrige Express for Business is available through some states' or regional Alliance programs' websites, and fees for the survey vary from $2,500 for up to 49 participants to $5,000 +$10 per participant for over 300 participants.

Advantages of Likert scale surveys include being quick and easy to administer and having the ability to have a wide variety of functions and levels in the organization take part in the survey. Disadvantages are the concern about accuracy and variability of responses because the scale items are subject to wide ranges of interpretation as well as the cost of the survey.

Behaviorally-Anchored Rating Surveys

The third category of self-assessments is a Behaviorally-Anchored Rating Survey (BARS*)*. These self-assessments combine "elements of a written narrative and a Likert survey approach to conducting a self-assessment" (Blazey & Grizzell, 2017). BARS consist of specific, observable behaviors (i.e., behavioral anchors) that exemplify critical performance dimensions or job relevant attributes or competencies at different proficiency levels relevant to the target context (Smith & Kendall, 1963). Typically, BARS are used in employee performance evaluations, as shown in Figure 1. The rating scale shows the Likert-type numerical rating with the descriptors providing guidance for the rating. This combination of numerical and descriptors lends itself well to measuring the maturity of an organization prior to submitting a Baldrige application. Several types of behavior-based surveys have been developed, all of which are available free of charge on the internet.

Figure 1 An Example of a Behaviorally-Anchored Rating Survey (Kell, et al., 2017)

Please rate the employee's *Responsibility* using the following scale.

Exceeds Acceptable Level of Performance	7 6	Always meets (or goes above and beyond) expectations of professional standards at work. Accepts complete ownership of all actions and is proactive about noticing and correcting any mistakes made. Works to earn the respect of co-workers and managers alike. Highly organized and careful in completing all work tasks on time. Adheres closely to all workplace rules, procedures, and policies. Performs duties according to organizational policies with little or no guidance.
Meets Acceptable Levels of Performance	5 4 3	Typically meets (but rarely exceeds) expectations of professional standards at work. Gets job done satisfactorily. Admits mistakes if noticed or when asked about them. Exhibits acceptable organization and completes nearly all tasks on time (or provides a valid excuse for not meeting a deadline). Tries to follow all workplace rules, procedures, and policies.
Fails to Meet Acceptable Levels of Performance	2 1	Rarely or only sometimes meets (never exceeds) expectations of professional standards at work. Often does not take ownership of mistakes or blames others for them. Does not earn (or try to earn) the respect of colleagues. Often disorganized or late completing assignments and tasks (without acceptable excuse). Ignores or does not make an effort to follow workplace rules, procedures, and policies.

The Quality Management Maturity Model (Wilson, 2012) consists of eight categories with items containing assessment statements in each category. This self-assessment tool was designed for libraries, and contains some library specific guidance, but it would easily adapt to manufacturing or other types of organizations. While the categories do not match precisely with the Baldrige criteria categories, there are sufficient similarities to include it in this study.

ManageHub® Baldrige Live is a software solution that includes a behaviorally-anchored rating self-assessment based on the Baldrige Excellence Framework (ManageHub, 2019). They have partnered with the Alliance for Performance Excellence, the not-for-profit partner of the Baldrige Performance Excellence Program, to provide a tool to kick-start an organization's efforts in applying the framework. ManageHub® provides a free feedback report with the free limited access.

The *Baldrige Aligned Self-Assessment Matrix Table* (Leonard, 2010) was designed to "reduce the perception that conducting self-assessment is overly costly, time consuming and intimidating." It contains the seven criteria categories aligned with the Baldrige Performance Framework, core values, items from the organizational profile, and assigned point values. The point values are assigned based on the maturity of the systems in the seven criteria categories. The matrix uses the process scoring guidelines and results scoring guidelines from the Baldrige Excellence Framework as a starting point with some added insight from Dr. Leonard's experiences.

Advantages of BARS include consistent ratings, low time and cost to complete, and identification of strengths and opportunities for improvement and deployment gaps. Disadvantages are highly developed organizations may not develop the skills needed to write their Baldrige application, and examiners may have difficulties developing comments based on the survey.

A Study of Self-Assessment Approaches

Each type of self-assessment; written narratives, Likert scale surveys and BARS were evaluated on four attributes; ease of use, financial cost, time to complete, and availability. This is illustrated in the selection grid in Table 1. Each category was assigned a numeric value based on the attribute that best reflected the self-assessment type. In this analysis, the lower the score, the more beneficial the category is to organizations.

The approach with the lowest score was compared to the 2017-2018 *Baldrige Excellence Framework* questions. Points were assigned based on the maturity of the responses to the survey to the requirements. If the tool possessed a question or information related to the *Baldrige Excellence Framework* questions, it received one point; if the tool had multiple questions or more in-depth information about the criteria questions, it received three points. In this investigation, the higher the score, the more the response matched the Framework questions.

Table 1 Selection Grid for Evaluating Types of Self-Assessment Tools

Attribute	Level 1	Level 2	Level 3	Level 4
Ease of Use	No prior knowledge of Award criteria is needed to complete self-assessment	Familiarity with quality system definitions is needed to complete self-assessment	Familiarity with the Award criteria is needed to complete self-assessment	Must be very familiar with Award criteria to complete self-assessment
Financial Cost	Cost to complete self-assessment is minimal	Cost to complete self-assessment can be hundreds of dollars	Cost to complete self-assessment can be thousands of dollars	Cost to complete self-assessment can be hundreds of thousands of dollars
Time to Complete	Time to complete assessment is less than 30 minutes	Time to complete assessment is between 1-5 weeks	Time to complete assessment is measured in months	Time to complete assessment is measured in greater than 12 months or years
Availability (ease of access)	Available on the internet or specific website with no cost	Available only from NIST with no cost	Available on the internet of specific website for cost	Available only from NIST for cost

Next, the individual tool that best matched the Framework questions was converted to a multi-question online survey. Trained and experienced examiners from the Baldrige Program and global excellence award programs were approached to participate in the study. Thirty-one examiners responded and were sent the 2018 Green Gateway case study and a link to the multi-question survey. Care was taken to eliminate examiners who participated in the creation or scoring of the Green Gateway case study. Each examiner read and reviewed the case study and ranked each section's level of maturity in the survey.

Figure 2 Radar Chart Showing Results of Self-Assessment Type Comparison

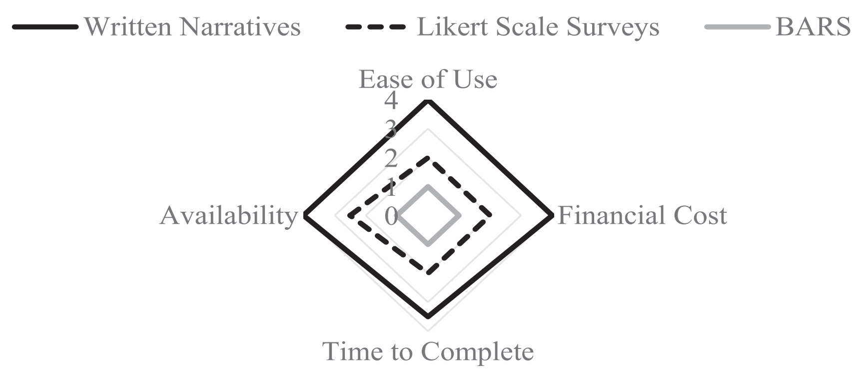


Figure 2 graphically displays the results of the selection grid for evaluating the self-assessment approaches. Behaviorally-anchored response surveys (BARS) had the lowest total score, indicating they are the easiest to use, lowest cost, least amount of time to complete, and readily available.

Using results, individual behaviorally-anchored results surveys were compared to the 2017-2018 *Baldrige Excellence Framework* questions. The goal of this step was to find the tool that best matched the questions in the Framework. Table 2 shows the summary of the section scores and total score for each tool. In this case, a higher score indicates higher alignment.

Table 2 BARS Compared to Baldrige Criteria

	Quality Management Maturity Model	ManageHub® Baldrige Live	Baldrige Aligned Self-Assessment Matrix Table
Leadership	3	3	4
Strategy	6	6	6
Customers	6	4	6
Measurment, Analysis, and Knowledge	3	4	6
Workforce	6	6	6
Operations	6	4	6
Results	4	7	15
TOTAL SCORE	**34**	**34**	**49**

Leonard's Baldrige Aligned Self-Assessment Matrix Table received the highest score from this analysis and was chosen for the comparison to the Baldrige case study. The Matrix Table was converted to a multi-question survey. The Strategy section excerpt is shown in Table 3.

Table 3

Strategy

○	1	Business plan focuses only on financial targets. Plans not widely communicated or championed. Mission statement exists. No systematic approach to review.
○	2	Start of systematic approaches. Critical success factors identified. Processes to collect key internal information enables reviews. Monitor business plans and targets. Performance comparisons to past performance and competitors. Project future performance. Major gaps in deployment.
○	3	Innovative approach forming. Systematic, responsive approach. Move from reacting to problems to prevention and continuous improvement. Early stages of deployment. Competitor and customer satisfaction data collection and analysis. Results widely communicated.
○	4	Fact based; effective approach well-deployed through many areas to ensure processes are reviewed. Promotes understanding of vision, strategy, policy, and responsibilities to all stakeholders. Effective, efficient communication.

Table 3 (continued)

Strategy

○	5	Relevant resources proactively made available for improvement efforts. Aligned with the organizations' needs. Fact-based systematic evaluation, improvement process. Well-deployed throughout. Strategy takes full consideration of Baldrige model. Two-way communications monitored and improved.
○	6	Processes assess the relevance of strategy; policies and plans based on business results. Organizational learning. No deployment gaps. New culture developed.
○	7	Modification of strategy and policy a result of focus on being proactive. Organizational level analysis and evaluation, sharing of results. Clear evidence of refinement and improved integration of evaluation system.
○	8	Strategy understood by all stakeholders and senior management champions vision. Critical factors, i.e. customer satisfaction, reviewed at all levels. Fully deployed; no gaps. All business needs considered.
○	9	Process to analyze competitor strategy and maintain competitive advantage. Business needs considered in addition to future needs. Projection/scenario planning for future needs integral part of strategic planning process.
○	10	Strategies achieved. Continual improvement focus. Responsive systematic approach considering multiply issues. Fully-deployed; no weakness. Very strong fact-based evaluation and improvement processes. Extensive organizational learning. Strong refinement and integration across organization.

Each examiner read and reviewed the case study and ranked each section's level of maturity using the survey, using the radio button to select the correct level of maturity from the list. Once the examiners had completed the survey, results were tabulated and numeric values determined. Each examiner's score was converted from the "1 to 10" ranking into a score that reflected the scoring in the Framework. A factor (total score possible for section /10) was applied to each ranking to achieve the final scores. For example, if an examiner ranked the leadership category as a "5 the result was multiplied by 12, as the leadership category has a possibility of 120 points. The resulting score of 60 would then be used for that category.

Table 4

Category	Average Numeric Ranking	Factor	Study Score (n=31)
Leadership	4.7	12.0	57
Strategy	4.9	8.5	42
Customers	4.2	8.5	35
Measurment, Analysis, and Knowledge	5.1	9.0	46
Workforce	4.5	8.5	38
Operations	5.3	8.5	45
Results	4.6	45.0	209
TOTAL SCORE			**472**

The average numeric ranking from each category was determined, the factor applied, and the resulting scores are shown in Table 4.

The total average score from the study was 472, with the scores ranging from 206 to 955. Because of the wide distribution of the scores, a Grubbs Test for data outliers was performed. The Grubbs test determines if scores on either or both ends of a data range should be retained in the sample for interpreting results or whether they should be regarded as being inconsistent with the remaining observations (Grubbs, 1950). If the calculated p-value (probability) is ≤ 0.05, then one or both ends of the data range should be considered outlying and the outlier(s) removed from the data set. The Grubbs' test p-value for this data, 0.708, showed that none of the data are outliers.

The Baldrige-supplied Green Gateway case study included a copy of the Consensus Review Scorebook. This scorebook provided the assessment produced was created by a team of NIST-selected expert Baldrige examiners who evaluated the fictitious application against the Baldrige Excellence Framework (NIST 2018), This represented the feedback report. The feedback report and scorebook were not provided to the examiners that participated in the study.

Table 5 shows the comparison of this study's examiners and the examiners chosen by Baldrige for the feedback report. Similarities in the scores of the Strategy and Customers categories was shown with more divergence in the scores of the other categories.

Table 5 Comparison of Scoring

Category	Baldrige Team Score	Study Score (n=31)
Leadership	66	57
Strategy	43	42
Customers	34	35
Measurement, Analysis, and Knowledge	38	46
Workforce	47	38
Operations	32	45
Results	183	209
TOTAL	**443**	**472**

A capability analysis was performed to determine if the total score from the study was comparable to the Baldrige team's score. Capability analyses are used to evaluate whether a process is capable of producing outputs that meet customer requirements by specifying a target and specifications. This analysis was selected because a comparison of the study score to the Baldrige team's score would reflect the match between the Leonard Matrix table and the Baldrige Team scores.

Using the Baldrige team score of 443 as the target, the maximum possible score of 1000 as the upper specification, data from the study was analyzed. Part of the capability analysis is the determination of a p-value to test if the study data differs from the target value. If the p-value is $\leq$

0.05, it is concluded that the mean differs from the target with 95 percent confidence.

The p-value of 0.476 showed that the study score of 472 does not differ statistically from the target of 443. This capability analysis shows that by using the Leonard Baldrige Aligned Self-Assessment Matrix Table, an accurate estimation of the score of a Baldrige manufacturing application is attainable.

Conclusion

This limited study showed that a self-assessment tool can measure the progress of an organization against the Baldrige Excellence Framework. It also verified anecdotal information from Baldrige experts and the European Foundation for Quality Management that alluded to a positive relationship between the scores of their self-assessment tools and the final score of Baldrige Award recipients. This information can assist organizations in the development of their application for the Malcolm Baldrige National Quality Award.

Key **Takeaways**

- Self-assessments are useful tools that can be used to assist a company in their Baldrige award journey.
- Three types of common self-assessment approaches are written narratives, Likert-scale surveys, and behaviorally-anchored response surveys. (BARS), each having their own advantages and disadvantages.
- An analysis of each type of self-assessment using a selection model consisting of four attributes; ease of use, financial cost, time to complete, and availability, showed that BARS are the easiest to use, lowest cost, least amount of time to complete, and readily available.
- A research study using Baldrige examiners and the 2018 Green Gateway case study showed that the Baldrige Aligned Self-Assessment Matrix Table self-assessment tool can reliably predict the score of a Baldrige application.

References

Blazey, M. L., & Grizzell, P. L. (2017). [CD] *Self-assessments of organizations and management systems.* Milwaukee, WI: American Society for Quality, Quality Press. https://doi.org/10.1108/01443579910291050

Grubbs, F. (1950). Sample Criteria for Testing Outlying Observations. *The Annals of Mathematical Statistics, 21*(1), 27-58. Retrieved from http://www.jstor.org/stable/2236553

Illinois Performance Excellence. (2019). Baldrige Express FAQs. Retrieved from http://ilpex.org/assess/baldrige-express/#toggle-id-2.

Kell, H. J., M. P. Martin-Raugh, L. M. Carney, P. A. Inglese, L. Chen, and G. Feng. (2017). "Exploring Methods for Developing Behaviorally Anchored Rating Scales for Evaluating Structured Interview Performance." *ETS Research Report Series, (1) 1-26.* https://doi.org/10.1002/ets2.12152

Leonard, D. (2010). The self-assessment matrix 2009-2010: A Baldrige based tool for the introduction, training, and assessment of organizational performance excellence. https://quality-texas.org/wp-content/uploads/2014/11/The-Self-Assessment-Matrix-2009-2010.pdf

ManageHub. (2019). Our story. Retrieved from https://www.managehubaccelerator.com/our-story/

National Institute of Standards and Technology. (2017a). 2017-2018 Baldrige excellence builder. Retrieved from https://www.nist.gov/sites/default/files/documents/2017/02/09/2017-2018-baldrige-excellence-builder.pdf

National Institute of Standards and Technology. (2017i). Self-assessing. Retrieved from https://www.nist.gov/baldrige/self-assessing

National Institute of Standards and Technology. (2019c). Baldrige excellence builder: Assess the maturity of an organization to realize process improvement success. Retrieved from www.nist.gov/baldrige

National Institute of Standards and Technology. (2019e). Self-analysis worksheet. Retrieved from https://www.nist.gov/sites/default/files/documents/2019/04/04/2019-2020-self-analysis-worksheet.docx

Smith, P. C., & Kendall, L. M. (1963). Retranslation of expectations: An approach to the construction of unambiguous anchors for rating scales. *Journal of Applied Psychology, 47*(2), 149–155. https://doi.org/10.1037/h0047060

Van Der Wiele, T., Brown, A., Millen, R., & Whelan, D. (2000). Improvement in organizational performance and self-assessment practices by selected American firms. *Quality Management Journal 17*(4) 9-22. Retrieved from http://asq.org/pub/qmj/past/vol7_issue4/qmjv7i4vanderwielez.pdf

Wilson, F. (2012). Quality Culture Assessment Instrument. *Quality Maturity Model*. Retrieved from http://www.qualitymaturitymodel.org.uk/qcai

LEADERSHIP AND MANAGEMENT PERSPECTIVES

LEVERAGING THE GENETICS OF LEADERSHIP

Cracking the Code of Sustainable Performance

Daniel B Edds, MBA
Praxis Solutions

Brian is a millennial, a brilliant civil engineer, and an emerging leader in one of the world's largest engineering firms. In his early thirties, he applied for an internal promotion. The job placed him among 300 emerging leaders who would manage the firm of 19,000 employees. As he explained, "I thought I was applying for a title. Then they gave it to me, and I realized I had no clue what I was supposed to do as a leader." When I asked what kind of training his company gave him, his eyes got big, and he said "nothing." Unfortunately, this is the norm. Two-thirds of all first-time managers receive no training, coaching, or mentoring in leadership. Those who do receive training cannot implement what they have learned because of entrenched systems.

Fortunately, Brian is, by nature, a systems thinker. So instead of designing a wastewater treatment system, he designed a system of leadership. His research convinced him that leadership is "*a relational enterprise*," therefore, he designed his system with a unique DNA that would produce relationships. These relationships would be both with himself and within his team. When I asked how it was working, he said, "I am the youngest (37) of these 300 senior leaders. The next youngest is ten years my senior, but the crazy thing is, they are asking me how to lead."

Why Contemporary Leadership Approaches Often Fail

Brian's story is not unique. As a millennial, he is discovering what other millennials are seeing. Leadership training fails to produce better leaders because of "poor content, insufficient thinking and expertise from outside sources, and a failure to prove return on investment." (Belcher and

Naughton 2018, 10) Jeffrey Pfeffer of Stanford University echoes this when he states, “It is not just that all the efforts to develop better leaders, decades such effort notwithstanding, have failed to make things appreciably better... it makes things much worse.” (Pfeffer 2015, 5)

There are also several reasons why contemporary approaches to leadership are failing to impact organizational performance:

1. Leadership development is a stand-alone training divorced from organizational values, cultures, and requirements.

In contrast, the U.S. Army has an entire school for every rank. In an interview with General Barry McCaffrey, retired four-star General, he explained how becoming a one-star General required a nine-month school in how to execute the responsibilities of a one-star General. Each additional promotion in rank, two-star, three-star, and four-star, required another nine-months of training.

During my interview, he explained the value of training tied to each rank in the preparation and execution of war. During the first Gulf War (1990-1991), General McCaffrey was the Commander of the 24th Infantry Division (Mechanized). Three weeks before executing the famed “left hook,” his Chief of Staff, his most crucial assistant, was promoted and reassigned. A week later, the new Chief of Staff arrived. General McCaffrey had never met him and knew nothing of his background or experience. However, he knew his training, and he felt he could trust it. This new Chief of Staff had two weeks to finalize preparations for 26,000 soldiers, 4,600 armored and wheeled vehicles, and 100 aircraft to execute the most logistically complex maneuver since World War Two. The General stated, “the new Chief of Staff performed flawlessly, with no loss in performance.” General McCaffrey explained that this consistency in performance is available because the Army had trained this officer to the unique duties of a Chief of Staff.

2. Training focused on an antiquated understanding of leadership.

Traditional models of leadership create a two-tiered hierarchy, leaders and followers. However, elite organizations realize that their workforce represents human beings with unimaginable capacity for creativity and innovation. These organizations train their leaders into a system that will unleash these essential human capacities. Millennials find this particularly attractive because they represent the most highly educated workforce in the history of humanity. They fully expect their voice to be heard and considered equally with their superiors.

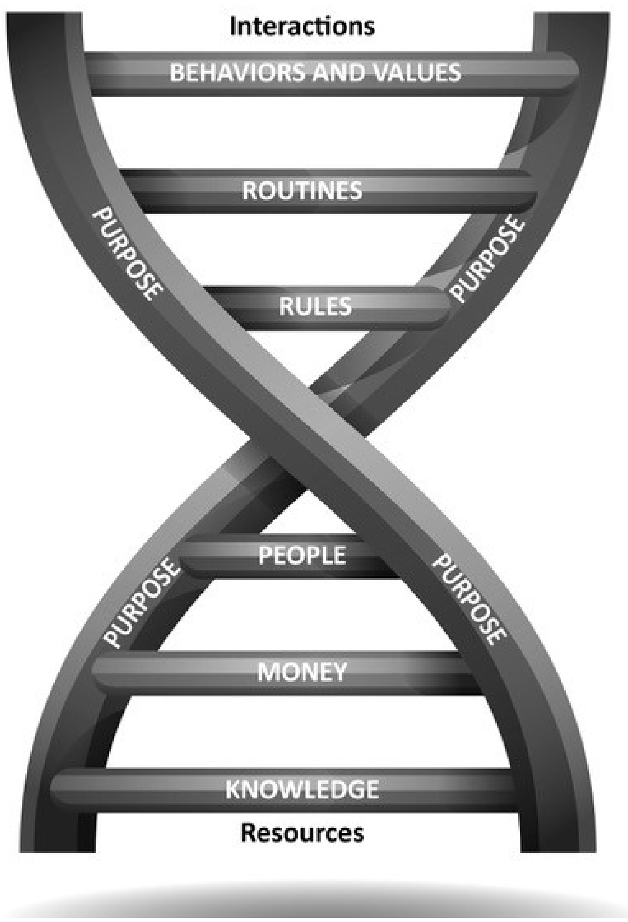
3. Lack of a systems perspective.

In his book, *Turn the Ship Around*, Captain David Marquet recounts taking command of the *USS Santa Fe*, a nuclear-powered attack submarine. On his first training cruise, he discovered that the system of leadership designed by the United States Navy would not work on this submarine. In response, he designed a new system with a unique genetic code that changed the math. Instead of one leader giving orders to 134 sailors, who were waiting to be told what to do, the new system would generate "135 independent, energetic, emotionally-committed and engaged men" (Marquet 2012) focused on the submarine's performance.

As George Clifton, Chairman of Gallup, states, "America needs to historically transform the practice of management similar to the way Six Sigma and Lean management improved processes in the 1980s." (Gallup 2017, 2)

The Solution - Leadership as a Designed Organizational System

Figure 1 Organizational System of Leadership



The Baldrige Excellence Framework has been an innovator in organizational leadership by referring to leadership as a system. Others are following as well. In her book, *Professionalizing Leadership*, Dr. Barbara Kellerman, the James MacGregor Burns Lecturer in Public Leadership at the Harvard Kennedy School, states, "I think of leadership now as a system—the leadership system." (Kellerman 2018) My research of organizations that consistently perform at high levels confirms this approach. They treat leadership as a designed organizational system. Subjects of my research include multiple Malcolm Baldrige National Quality Award recipients, elite health care, manufacturing, and educational organizations, and groups as diverse as the New York Mafia, the Salvation Army, an NFL Super Bowl Champion, and the U.S. Military. But what exactly is a system of leadership, and can it be mapped to the Baldrige Excellence Framework?

A System of Leadership

Donnella Meadows, one of the early systems theorists, defines a system as having three parts, as shown in Figure 1: (Meadows 2008, Kindle Location 329)

1. A set of core elements, or "resources,"
2. Interactions among these resources,
3. A function or purpose.

Therefore, a system of leadership is 1) a set of key organizational resources that 2) interact in a specific way to 3) achieve a designated function or purpose.

System Purpose or Output

When Brian determined that leadership is a "relational enterprise," he had tapped into the most powerful attribute of a system – its purpose or outcome. As Meadows states, "The least obvious part of the system, its function or purpose, is often the most crucial determinant of the system's behavior" (Meadows 2008, Kindle location 432). Brian also stumbled upon something else. In determining that his personal leadership should produce relationships, he also identified the experience of his workforce. They could expect to experience authentic relationships with him and their co-workers.

In the Baldrige Framework, Area to Address (ATA) 1.1.c(1) addresses how senior leaders create cultures that engage the workforce and strengthen the environment for success. Brian determined that the working environment of his team would build relationships. However, this purpose also created the experience of the workforce. (ATA 5.1 & 5.2) When Brian pulled out the cubicle dividers, opened up the office, and then installed a ping-pong table in the middle of the floor, he created a unique experience for the workforce tied to his leadership system that focused on relationships.

Developing System Resources

All organizations have three primary resources, 1) people, 2) money (in the broadest sense), and 3) knowledge and information. The most important difference I found in my research is that average organizations understand these resources as assets that need to be managed (controlled). Organizations that consistently perform at elite levels recognize these resources as opportunities for growth and development. They also tie closely with the Baldrige Framework.

<u>People Resources</u>

During an interview, I asked an elementary school principal to confirm that staff development meant the whole person and not just the professional parts. She responded, "*Of course, why would I want half a teacher walking in my door?*" In their book, *An Everyone Culture,* authors Robert Kegan and Lisa Laskow Lahey, detail a similar theme. They profile three leading companies, one of which is Next Jump, Inc., a $2 billion technology firm whose mission is to change workplace culture. They do so by practicing whole human development. The result is that they develop better human beings, which creates more value for their customers.

ATA 5.1.a.(1) addresses workforce capacity and capability. What my research found is that organizations that consistently perform at elite levels understand that developing human resources includes the whole human and not just professional capabilities.

Money Resources

Organizations in my research understand money, including plant and equipment, is a resource to be developed to deliver ever-increasing value. Virginia Mason Hospital (V.M.) in Seattle, Washington, is the world's leader in applying the Toyota Production (Lean) and Management Systems to health care. Rather than fixating on budgets, they focus on eliminating waste and error-free health care. The difference is nuanced. However, by focusing on eliminating waste and medical errors, they control costs at the source. During the 2007 economic recession, contrary to most hospitals, they did not have one layoff, and they continued to pay bonuses.

ATA 6.2.a addresses the efficient use of financial resources. V.M. links their application of Lean with their leadership system by requiring all leaders to become certified in Lean and then personally lead one to three Lean workshops each year, including their CEO.

Knowledge and Information

High performing organizations are relentless about learning. With every leader at V.M. personally conducting Lean workshops, there is a lot of knowledge being created that must be assimilated into daily operations. Every Friday afternoon between noon and 1:00 p.m., there are "report outs," where each Lean workshop is reviewed. During my observation, I witnessed five report outs covering the improvement of complex medical procedures to discharging patients with sepsis.

ATA 5.2.b addresses organizational culture and the empowerment of the workforce. With every leader at V.M. personally conducting Lean workshops, they create a culture where the entire workforce is focused on eliminating waste and medical errors. Furthermore, leaders operate within rules that require them to push problem-solving down to those closest to the work.

System Interconnections

Every time a DNA molecule splits, which happens approximately two trillion times a day, the process follows a precise routine based on a standard set of rules that will support behaviors within the human. Organizations also function in a world of rules, routines, and behaviors.

Rules

Every organization has rules. What I found is that the highest performing organizations intentionally design them. When Erin became the school principal of a failing school, she brought her entire team together and deliberately wrote the rules that governed their interactions. Within five years, it was the highest performing elementary school in a district of 25,000 students. Meadows states, "If you want to understand the deepest malfunctions of systems, pay attention to the rules and who has power over them." (Meadows 2008)

Every system operates within a framework of rules. When Erin brought her entire team to write their rules, she addressed ATA 5.2.b and created an organization "characterized by open communication, high performance."

Routines

During my interview with General Barry McCaffrey, I asked about how the U.S. Army teaches and reinforces servant leadership. He mentioned a routine: the highest-ranking officer is the last to board a departing helicopter and the first to get off the helicopter. This routine puts the officer in the most dangerous position, but also in a place of protecting his subordinates. This routine is one way the Army reinforces one of its core values: *Put the welfare of the nation, the Army, and your subordinates before your own.*

ATA 5.1.b(1) addresses the environment of the workforce, specifically the workplace and its health and the well-being of the employees. The U.S. Army trains its officers in a simple routine that protects the lives of its soldiers. Though mostly symbolic, it reinforces the principles of servant leadership and its core values.

Interconnections

In conducting my research, I was interested in how seriously high performing organizations take the personal behavior of their leaders and managers. John Heer is the retired CEO of North Mississippi Health Services (NMHS) and the 2016 recipient of the Harry S. Hertz Leadership Award. During my interview, he described eight core behaviors he asked each of his leaders to model in the design of his leadership system at NMHS:

- Kindness
- Respectfulness
- Selflessness
- Forgiveness
- Honesty

- Commitment
- Results-oriented/“no excuses”
- Ego directed toward team accomplishments

I found similar lists in the U.S. Army, the U.S. Marine Corps, and almost every high performing organization I studied.

ATA 1.1a(1) addresses both setting vision and values but also deploying them within the workforce. The U.S. Army, Virginia Mason, and Erin, the elementary school principal, linked the deployment of core values to leaders’ personal behaviors.

Case Study – Kaas Tailored

Kaas Tailored is a manufacturing company that designs and manufactures custom commercial and residential furniture. Their clients include major aerospace, fashion, health care, and hospitality companies. If you want to do business with them, get in line. They are as picky about their customers as they are about their furniture. In 2006, after ten years of mixed results, they formally adopted the Toyota Production System. This system required them to get serious about waste and extract it wherever and whenever it showed up. Jeff Kaas, the President, determined that the best way to do this would be to engage every employee in this pursuit, but it would require a new leadership approach. He designed a leadership system based on servant leadership principles as the method to engage the entire workforce in finding and eliminating waste.

Consequently, leaders and managers became coaches and mentors, serving the front-line staff in the daily work of eliminating waste. Nothing was too sacred to be eliminated if it failed to create value. One of the first things to go was Jeff’s own office. The real estate was expensive, provided no value, and was a two-lane tunnel through which six lanes of daily problems had to be compressed and prioritized. Jeff determined that it was faster to address issues on the manufacturing floor, working directly with his team.

By all rights, they should not be in business. They compete with international firms and companies in the American south, where labor is substantially cheaper. Yet in a region with some of the highest labor and real estate costs, Kaas Tailored thrives. They do so because they have engaged their entire workforce to find and eliminate waste. Consequently, 200 employees generate 1,000-1,250 kaizens per year, each kaizen saving the company an average of $1,000. It is the equivalent of saving 4 percent to 5 percent of gross sales each year.

As word spread about their quality and value delivery to their customers, people started asking how they did it. So, they started giving tours. As of December 2019, 40,000 people have taken their tour, and they have so many requests for help that they have spun off a consulting company to address the demand for their help. Their first client is a long-time customer, a high-end national retail clothing brand.

Concluding Thoughts

Sarah Patterson is the Executive Director of the Virginia Mason Institute, the training organization tied to the hospital. They train hospitals worldwide on how to apply the Toyota Production System to health care. In describing leadership, she states, “Effective leadership is about reliance on a well-constructed, continuously improving system that long outlives any leader, no matter how dynamic... It’s really about how the whole system holds together, and every single leader is committed to and expected to follow the standards.” (Kenney 2011, 152)

References

Gallup, State of the American Workplace, 2017.

Belcher, Diane and Marisa Naughton. 2018. “The State of Leadership Development 2018, Meeting the Transformation Imperative,” Harvard Business Publishing, Page 10

Kellerman, Barbara. 2018. *Professionalizing Leadership*, Oxford University Press. Kindle Edition. Kindle location 1561.

Kenney, Charles. 2011 *Transforming Health Care* CRC Press.

Marquet, L. David. 2012. *Turn the Ship Around!* New York, NY: Penguin Publishing Group. Kindle Edition, 2012. Kindle location 1396.

Meadows, Donella H. 2008. *Thinking in Systems: A Primer*. Chelsea Green Publishing. Kindle Edition.

Pfeffer, Jeffrey. 2015. *Leadership BS: Fixing Workplaces and Careers One Truth at a Time*, Harper Collins.

POSITIVE CHANGE LEADERSHIP

Why a New Leadership Paradigm is Necessary Today

Sherry Bright, MSPH
Care Collaboratory, Inc.
Bright Strategies, LLC

Anne-Claire France, Ph.D.
Care Collaboratory, Inc.
Houston Health Innovations, LLC

Read G. Pierce, M.D.
Care Collaboratory, Inc.
Department of Medicine, Dell Medical School, The University of Texas at Austin

Gene Beyt, M.D., M.S.
Care Collaboratory, Inc.
Department of Health Policy & Management
Tulane University School of Public Health & Tropical Medicine

Especially in 2020, changes have come so fast and furiously that organizations large and small are struggling to keep up and find their way. Conventional wisdom and tried-and-true solutions no longer seem effective. Still, some organizations manage to find a way through the complexity and do more than just hang on. For companies to not only chart a course through the current morass, but to be prepared for the next challenge, we believe certain principles and behaviors are critical.

Sustainable success has always required the integration of three interrelated elements: the environmental, customer, and workforce requirements. Most successful organizations have an approach to each of these elements, which may have needed tweaking over time, but, for the most part, have worked for them. These may be complicated approaches, but ones where the steps have previously been tested. Indeed, analysis of past performance and future projections has always been a bit of an art. Now, however, all three of these elements are shifting in ways that create a more dynamic and complex landscape. While a great many factors are in play, for simplicity we focus on the impact of the COVID-19 pandemic. It is roiling not only health and economic conditions but has revealed underlying cultural and social issues. It is directly impacting relationships, expectations, and requirements of and for constituents, customers, and the workforce. It feels like everything is moving at the same time, and neither the short- nor longer-term future is clear.

A fourth critical element is the system of leadership and management that organizations have in place and how that system deals with this complexity. A key reason some thrive during periods of chaos and others fall away is how leaders lead. We believe leaders who authentically deploy positive change can have a direct impact on how well their organizations respond to COVID-19 or any other dynamic challenge.

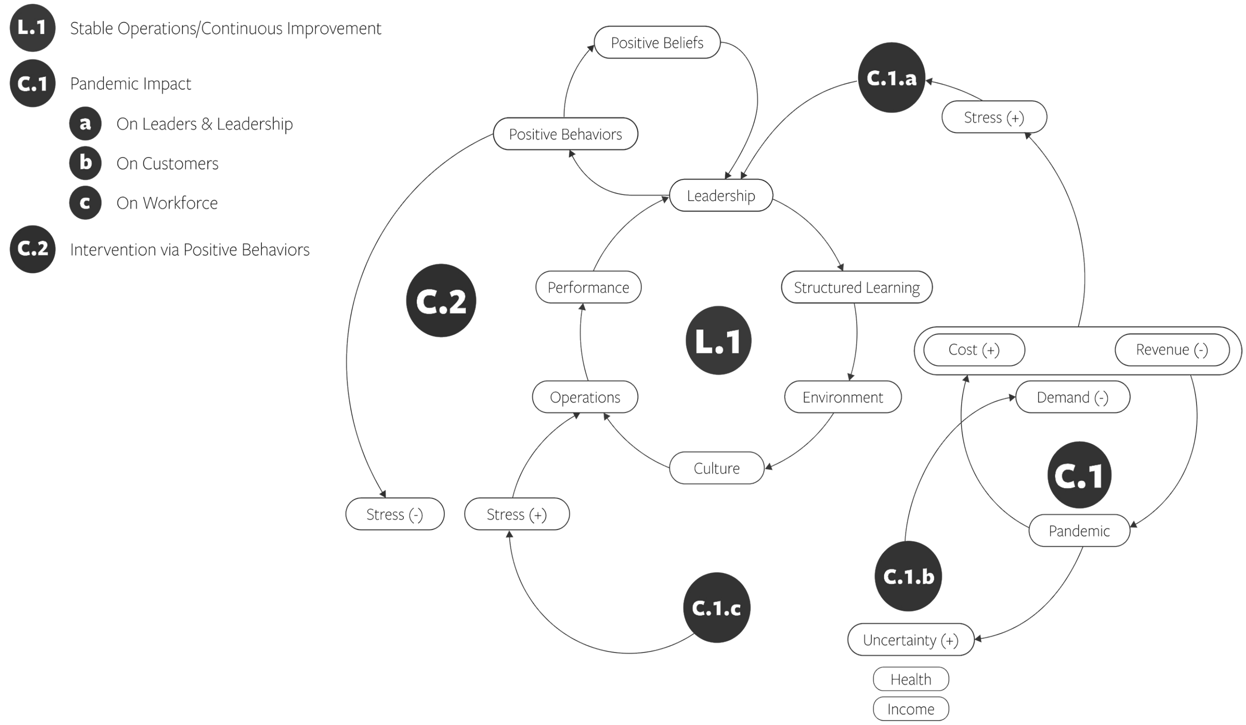
What Leaders Do

Joseph Juran said, "Observing many companies in action, I am unable to point to a single instance in which stunning results were gotten without the active and personal leadership of the upper managers." This may be why Leadership is Category 1 within the Baldrige Excellence Framework. A leader's core function is to successfully motivate a group of people to achieve a common goal. While hundreds of books have been written about how to build leaders' capabilities and effectiveness, few have reflected the context leaders find themselves in today.

In today's time of uncertainty, effective leadership has never been more important. People look to leaders for clarity and confidence. They both want, and need, to trust them in order to willingly follow their lead. Leaders who earn that trust, especially while so much is unknown and unknowable, have great power. Those leaders who embrace the opportunity, who look to what is possible and authentically engage their constituents in addressing shared challenges, earn that trust through which much is possible.

Figure 1 illustrates a causal loop diagram to help leaders better comprehend the complexity of these stressors on an organization. The diagram visualizes how these external variables impact a steady state organization. As background, relationships between variables are either positive (+); i.e., they move in the same direction, or negative (-), where the two variables have opposite results. The steady state (L1) represents a positive, reinforcing closed loop. Leaders impact a series of nodes: organizational learning, organizational environment, culture, operations, and performance results. They establish, cultivate, and reinforce the environment and culture within their organizations. Good leadership results in good performance, thus reinforcing the way leaders lead. And the cycle continues. External changes (C.1 & 2) may have a positive or a negative influence on one or more nodes. Understanding these external changes and their projected impact allows leaders to the opportunity to prepare, adapt and mitigate – or multiply – their impact.

Figure 1 Causal Loop Diagram



By definition, organizations, regardless of type, exist to produce something (product or service) of value. As Deming wrote, "*The aim proposed here for any organization is for everybody to gain – stockholders, employees, suppliers, customers, community, the environment – over the long term."* (Deming, 1993, 51) Leaders, whatever their level, are selected to ensure the organization's aim is met. Leaders are expected to be intelligent, competent, self-confident, action-oriented, charismatic, visionary – quite the list of characteristics. But there are other qualities that are equally, or perhaps even more important: empathy, caring, compassion, forgiving, inspirational, meaningful, and authenticity. These are the characteristics that enable positive change, (Cameron, Mora, Leutscher, and Calarco, 2014, 266) and when they are the source for the behaviors and actions leaders take, it makes a difference not only in how an organization's workforce feels, but also in what it can accomplish.

In concert with governance, leaders set direction, prioritize resource plans and processes, and set specific goals and targets. They put in place the management and oversight structures and mechanisms that enable value creation. They determine which aspects of the organization to maintain and which need to change. Baldrige calls this the leadership system, a set of principles evidenced in the decisions that are made and the way they are implemented. This system also creates and reinforces, for good or ill, the organization's culture. Organizations where change is powered by positive psychology are driven by leaders who engage their workforce and build a culture of willing commitment to do what it takes to consistently deliver great results.

Leaders that accept the cause-and-effect theory of positive change engage in collaboration, respect those who are closest to the process, persevere in hard times, and call constituents to a set of higher principles and values. They ensure leadership development processes for leaders at all levels support these initiatives and deploy these principles to their employees. They actively share success and provide frequent positive feedback, even for daily routines built in to ensure reliability – be it accolades or financial returns – with those who made it happen. Leadership systems powered by positive change are capable of both action and compassion: they effectively link the call to action with mission and meaningful work while recognizing the legitimate concerns of customers and the workforce at the same time. Positive change leaders give direction and make decisions that reflect both. Evidence-based positive change techniques exist and may be what is most needed, now, to lead organizations through these daunting times of the pandemic.

Managing Turbulent Times

Change is a constant, but the level and rapidity of it today makes it more difficult than ever to project what even the near future will be like. While everyone cries out for a return to normal, everyone also knows (whether they admit it or not) we cannot go back to pre-pandemic days. To go forward will require change in myriad ways, not the least of which is how organizations will carry out their work. The pandemic's health and economic impacts demand unprecedented degrees of organizational agility to learn and act. In times like these, when historical trend analysis and projections are upended and leaders face the unknown, there is a risk external pressures, especially financial, and especially now, may make the focus of even the best leaders narrow to solely financial outcomes and business survival.

In 2020, we learned that the old tempo of innovation and change is too slow for the rapidly evolving situations we are facing. COVID-19 has required businesses of all types to change in real time. This has been costly – not only in terms of volume and revenue, operating costs for new supplies and physical modifications to facilities, but also in relationships with customers, communities, and the workforce (Figure 1, C.1.a,b,c). Much has been written and televised about the rapid cycles of learning and improvement health care providers have made. Other businesses, from Amazon to Walmart and many in between, have also made operational adjustments. For example: they have required masks, changed hours of operation, limited purchase of high-demand goods, and limited capacity, all of which forced behavior change on customers and employees.

Another example is the confusion this fall over school openings, or not, and how education would be implemented has affected nearly everyone. For example, a lack of childcare options means parents may not be able to return to pre-pandemic hours (even if their employer has re-opened). The lack of knowing what to do now, and what comes next, raises everyone's anxiety.

The rapidity of needed change in daily operations puts additional strain on pre-pandemic leadership and management systems, including learning systems. Uncertainty is high, yet changes need implementation and, in some cases overnight. These circumstances challenge the conventional, traditional way things are accomplished in organizations. Equally as important, leaders realize they must change, too.

Positive change leaders embrace their role in helping people make sense of what is happening, act, and transparently communicate the good, the bad and the ugly of decisions. Positive change leaders trust themselves and their people – and believe together they can continue to meet the needs and expectations of their customers. They have the courage to do the right thing. They think through not only what needs to happen but also think deeply about what that means for everyone else.

The Superpower of Trust – Customers

We know that people are experiencing cognitive whiplash from this year's events. Most people are legitimately concerned, even afraid, and therefore hesitant to re-enter their pre-pandemic lives – even though they desperately want to. (Figure 1, C.1.b) When leaders have demonstrated characteristics of empathy and respect, customers are more likely to respect and trust them and their actions. Trust is earned and links directly to the reputation of the organization in its market. "When there is a high-trust brand, customers buy more, refer more, give the benefit of the doubt, and stay with you longer." (Covey, Merrill 2006, 35) Customers want to make choices with confidence and reassurance that they are doing the right thing.

Leaders establish and resource management systems and processes for listening to, thinking about, and responding to the needs and concerns of their constituencies. Leaders who believe in positive change enter these processes with curiosity and a deep desire to understand what stakeholders *truly care about and need*. They deploy this curiosity to managers who are charged with designing listening and learning approaches that get below the surface. The information gained is not only actionable but acted upon. Customer learning also feeds into and influences organizational strategy and strategic planning. Hard-wired processes ensure the flow of information to product or service managers who are expected to use this knowledge to improve products and services. After which, research is done to determine the impact of changes made to continuously inform operations, improve organizational learning, and influence future communication and interaction. To date, actions businesses have taken, and are taking, in response to COVID-19 are rarely welcomed by customers. It takes courage for leaders to require, for example, masks to be worn or to usher patrons out of bars early. However, organizations that have successfully built trust with their customers are better able to maintain customer respect and loyalty.

Ed Schein's work on Humble Inquiry (Schein, Edgar 2013) emphasizes the importance of asking questions when you do not know (and do not think you know) the answer. Sometimes market research is conducted to confirm an organization's beliefs rather than to expand them. Most organizations do market and customer satisfaction research. At issue is whether the research is driven by true curiosity, desire to learn, and willingness to act or is a *pro forma* effort. Satisfaction surveys and, equally important, research digging into dissatisfiers, can serve as starting points to understand drivers of customer loyalty and engagement. Additionally, engagement in town halls, focus groups, community boards, and other means of interacting with customers and the community are great opportunities for learning when not used to drive a predetermined agenda, and drive true inquiry and collaboration. Numerous other listening and learning tactics can be mined to understand opportunities to better meet needs and expectations. Genuine respect for what individuals external to the organization have to say, even if – especially if – it is different from the organization's conventional wisdom, is critical.

The Blue Ocean (Kim, Mauborgne, 2017) model, a powerful approach to rethinking business strategy, begins with the idea that organizations should not try to out-compete competitors on existing features but, instead, look for nuances in the customer data already available. Digging even more deeply allows the organization the opportunity to respond to unspoken needs and to leapfrog competitors. To hear the nuance and grasp the implications from these interactive opportunities requires listening with empathy and respect. Positive change is built on honest curiosity and a willingness to take direction from what is learned.

Customer and community engagement and loyalty are outcomes of organizational learning and leaders with a performance excellence mindset using double loop learning (Argyris, Schon, 1974) tied to product offerings and coupled with authentic strategic action. For example, effective leaders and managers successfully translate this learning into the features of product or service offerings. This trust-building work pays extra dividends in these challenging times when customers and communities are nervous, frustrated, angry, tired, and resentful all at the same time. Organizations that can depend on mutual respect and trust with their community and customers will have stronger communication channels and relationships that make operationalizing these restrictions less challenging.

The Superpower of Trust – Workforce

Trust, and especially mutual trust, is the foundation on which collegiality and engagement are built. Treating every member of the workforce with respect, demonstrating authentic consideration for their concerns, opinions, and ideas fosters trust. Empathy supports efforts by leaders to consciously embed meaning in the work others do, connecting it to the organization's mission and vision. Behaviors, actions, and decisions driven by good intentions – not just for the organization but also for the individual – create a work environment and culture of *can do* rather than one of *must do*. More importantly, it creates a powerful culture of *we can do it together!*

Leaders who show their appreciation to the workforce for both their vital role in delivering operational quality and their inherent human value build trust. At the same time, leaders can still expect the system to deliver high performance while simultaneously building sustainable excellence from the ground up. A model such as Just Culture (Dekker, 2007) aligns expectations for performance and accountability by seeking to understand what went wrong when errors occur rather than assigning blame. This model builds both trust and high expectations.

Management tactics such as Management By Walking Around (MBWA), its more recent iteration, intentional rounding, or employee engagement surveys can be effective vehicles to hear the concerns and ideas of the workforce. They can also be a vehicle to demonstrate positive change traits. However, rounding's focus must be a sincere effort to understand the work environment, how it strengthens – or weakens – the workforce. At the same time, engagement surveys can also indicate opportunities. However, too many employers are seeking ways to do things *for* their workforce, without ever considering what they are doing *to* them. In the end, while leaders set direction, it is the workforce that delivers the value for which customers are willing to pay.

Keep in mind, employees are very good at determining the sincerity of those with whom they work, and that same skill is put to work with their managers and leaders. The purpose of listening to the voice of the workforce through frank, two-way communication is an *honest* commitment to evaluate issues raised, make appropriate improvements, and close the communication loop. Positive leaders value workforce input and, as a result, work with the workforce to identify ways to benefit the worker and the organization. In this way, a foundation of relationship and trust is established, and sustainable high performance may be achieved.

In today's critical time, the most urgent strategic issue organizations face is a focus on the short-term: determine exactly what should their organization do to survive the pandemic, how fast must they do it, and how to emerge as a stronger, more resilient entity, one that is capable of successfully addressing future challenges. Key to this is how to bring their workforce back – and be open and honest with those who will not be coming back. Workers are both eager to return to work and legitimately concerned for their safety. They also are concerned with the future of the company and what all this may mean for their longer-term employment. Rumors abound, fueled by fear and misinformation (C.1.c). Effectively countering them in a mutually-trusting environment is much more likely. Thus, leaders have a powerful opportunity to authentically demonstrate positive traits of compassion, empathy, respect, and gratitude, while building trust that will pay dividends today and tomorrow.

The whole concept of "essential workers" and realization of the importance of individuals who provide our care – and cook our food, stock our shelves, and pick up our garbage – has shocked many of us. It is to be hoped that this may lead to a cultural shift in appreciation and respect for work no matter what it is. While some “non-essential” workers have maintained their jobs and livelihoods through the ability to work at home, many others have lost both and may never regain them. Leaders need to empathetically understand the real-life world of their employees in order to appreciate their needs and respond effectively to them.

At the same time, poor communication of organizational changes at a time of uncertainty stokes fear and threatens a positive culture. To be fair, errors in leadership and in implementation occur – and may be more frequent in times of rapid innovation and changing rules. Remember the Japanese saying, “Every defect is a gift,” and treat the lessons learned from that perspective. Indeed, highly reliable organizations are truly “sensitive” to their operations. (Weick, Sutcliffe 2007) This refers to ongoing interaction and sharing of information about current human and organizational factors so that adjustments can be made to ensure all processes are always reliable, no matter who is being served or the variation in circumstances. This translates to empowerment of informed decision making and expectation management, the secret sauce of workforce engagement.

Today, the best available information and description of best practices is evolving rapidly, forcing organizations to change structures and operations again and again. Any change decision is only as good as its implementation, involving everyone, whether in response to suddenly occurring change needs or longer-term strategic initiatives. Change plans must be deployed into the organization and drive action that impacts key performance results on the journey to achieving objectives. Whether culture, indeed, eats strategy for breakfast or just nibbles at it, there is little doubt that a positive culture impacts implementation. Regardless of the elegance of a plan, it is the behavior and commitment of the organization’s people that determines what will occur. The ability to learn fast, act, and adapt quickly is critical. The principles of positive change encourage leaders at all levels of the organization to work with their staff to engage them compassionately to inspire, rather than mandate, them to act.

To act with confidence, employees must trust the intentions of their leaders for the good of the organization and the workforce. Transparency is critical: when workers believe they honestly know the challenges they face, performance expectations are clear, and they trust their leaders, great things can happen.

It is abundantly clear that the future – especially the near future – demands change. Relying on negative pressure tactics; i.e., a burning platform, will not enroll your workforce and customers in the success of your operation. When change in how we live, work, and play, alone or in our families, in social and work settings, is our future, we need a different approach. Leaders play a unique role as translators between the needs of the market and customers and the priorities and decisions of the organization which flow into short-term action plans and longer-term development. Senior leaders also play a similar role within community boards and other organizations. However, nothing gets done without the engagement of the people involved. Leaders who truly believe in the power and importance of the workforce – not just giving lip-service to "people are our greatest asset" – can be unstoppable.

Evidence Supports this Approach

While bad news seems never ending, our recommendation to explicitly transition to positive change principles should be welcome. These principles are not about ignoring the bad news or denying that challenges exist. It is about addressing them clearly and honestly, but with the belief that finding a way through might be hard, but it is achievable. Leadership is an art, and its medium is connection. (Taylor, 2011) Connecting with positivity reveals a virtuous reinforcing cycle: positive leadership can create a positive culture which can enable individuals and organizations to tackle complex situations and wicked problems more successfully. Leaders who take the time to think through the kind of organization they want and need to accomplish their mission, who design the systems of leadership and management to bring it to reality, can transform their organizations. Leaders must be willing to learn, practice, and live within a positive change mindset to create a different, stronger, more agile, and higher-performing organization.

We believe that developing or burnishing positive behaviors and processes throughout the organization is critical to the longer-term success of business. Workforce engagement and customer loyalty will increase and sustain that success (C.2). This is particularly important given evidence in positive psychology and neuroscience that illustrate negative events and experiences are more intensely weighted in individual and collective memory than positive events and experiences. In the context of leadership and culture, this means negative interactions render more reaction than positive ones, and these negative experiences result in a host of emotions such as fear, anxiety, shame, guilt, and embarrassment that impede psychological safety, creativity, teamwork, and engagement – known prerequisites for great performance. Indeed, research demonstrates that to achieve threshold levels of thriving and maximal human effectiveness requires three to six positive interactions for every negative interaction – and yet many organizations and leaders focus overwhelmingly on what is negative, broken, insufficient, or *below benchmark.* (Youssef-Morgan, Luthans 2013)

Conversely, organizations founded on positive psychology principles create work environments where individuals thrive, teams cultivate caring relationships, and the organization's culture is compassionate and empathetic with the by-product of outstanding quality and value-driven outcomes. Put another way, in pursuit of great results, the role of leaders in contributing to the welfare of the organization's human capital is paramount. "Empirical evidence suggests that when positive factors are given greater emphasis than negative factors, individuals and organizations tend to flourish." (Cameron, Mora, Leutscher, and Calarco, 2014) And yet, a review of nearly 500 articles pertaining to organizational change published from 1987 to 2004 in the *Journal of Applied Behavioral Change* revealed negatively motivated-techniques were 10 times more likely to be employed than positive motivational ones. (Cameron and McNaughton, 2014)

At the same time, *positive change leaders* are clear-eyed, willing to look at bad news directly. They select and use data as a source, though not the only source, of learning with the end goal being to discover top-of-mind performance measures that support organizational design and performance improvement. They want and need context to be able to integrate what the data are telling them with a deep and appreciative knowledge of the organization, its workforce, stakeholders, and customers. They review performance to learn and to improve, not for blame or punishment where results fall short of expectations. Having created an atmosphere where everyone is united in achieving goals linked to the mission and vision, they understand that the workforce is equally committed. With respect, encouragement, and support, employees are willing to work hard to improve performance.

Leaders who believe in positive change principles are self-aware, allowing them individually and collectively to evaluate themselves in relation to others, to assess impact, and to commit to improvement. They role-model behaviors, a powerful way to be clear about expectations, providing guidance for internal and external audiences not only about the desired results of the organization but also how those results should be achieved.

These leaders evolve management systems that embody these same principles: authenticity, empathy, respect, transparency, learning, and continuous improvement. As a result, they create an environment that is future-oriented and respects the need to comprehend and address the very real issues of today.

A key example where this evolution may be needed is the organization's learning and development system. The rapidity of needed change in daily operations puts additional emphasis and strain on how the organization learns and implements. Uncertainty is high, yet changes need implementation – in some cases – overnight. This requires the ability to quickly translate new information into learning structures and processes, a new expectation for departments that are more comfortable with deliberate developments. Learning localized to an education or training department will be unable to keep up. "The ability to learn is embedded in the organization's structure and internal processes at every level, and reinforced through the culture and behaviors of staff, *including what leaders say and do*." (Berwick, 2020) Leaders must commit to thinking through what outcomes are and will be required of the organization and ensure that the approach to knowledge management and learning is up to the task. The same rigorous analysis and design/redesign may be required in multiple areas.

So People Don't Hurt So Much

Yes, the primary purpose of a business is to create value and return some sort of benefit to stakeholders. However, thriving, successful businesses commit to other purposes as well. For example, many large corporations are beginning to publicly articulate the importance of social responsibility in addition to stock performance and are explicitly linking their brands to social responsibility issues such as environment/climate change and labor/pay practices or engaging in volunteer or charitable activities. The pandemic accelerated this movement, which has been further energized by unrest over social inequities. Would it not be powerful if leaders committed to creating organizations that reduce pain and hurt for their workforce, their customers, and the community? Organizations can do this through intentionally designing and strengthening their cultures as the underlying approach to social responsibility issues.

Positive change is built on honest curiosity and a willingness to take direction from what is learned. People who embody the principles of positive change are better able to connect with others, generate commitment to action, and sustain performance through difficult times. Executives with these same attributes make a difference by shaping the culture of their organizations. Positive change leaders do not adopt a set of tactics and behaviors which they employ to "sell" their workforce, customers, or the community that they care. They act out of authentic kindness, openness, positivity, and trust in others.

As the saying goes, every system is perfectly designed to achieve the results it gets. Looking for the unintended consequences on people of the systems they have designed would enable leaders to identify opportunities for improving the work – and delivery – environments they oversee. Leaders who think deeply about their role and its potential to make a difference, who are sufficiently self-aware to identify areas of personal and/or systemic improvement, and who then choose to act are truly formidable. These leaders are trusted. And with trust, much is possible.

Kindness. Empathy. The ability to forgive. Caring for others. Transparency. Honesty. These are the characteristics that build trust. We know how to act this way: we do it with our families and our friends every day. When we act the same way as leaders in our organizations, we role-model behaviors that spread and create a reinforcing loop. Especially now, being capable of attaining and retaining the trust of employees and customers when the future is unclear can make a huge difference in your organization's survival and future ability to thrive. Your circle of trust will grow and, with it, your organization's capacity to innovate from the shop floor to strategic initiatives.

References

Argyris, Chris and D. Schon. 1974. *Theory in Practice, Increasing professional effectiveness*. San Francisco: Jossey-Bass.

Baldrige Performance Excellence Program. 2019. *2019-2020 Baldrige Excellence Framework (Health Care): Proven Leadership and Management Practices for High Performance*. Gaithersburg, Md: U.S. Department of Commerce, National Institute of Standards and technology: https://www.nist.gov/baldrige.

Berwick, Donald M. 2020. "Covid-19: Beyond Tomorrow Choices for the "New Normal"." *Journal of the American Medical Association, published online May 4, 2020* https:jamanetwork.com.

Dekker, Sidney. 2007. *Just Culture: Balancing Safety and Accountability*. Boca Raton, Fl:CRC Press.

Deming, W.E. 1993. *The New Economics.* Cambridge: MIT Press

Cameron, Kim, Carlos Mora, Trevor Leutscher, and Margaret Calarco. 2014. "Effects of Positive Practices on Organizational Effectiveness", *The Journal of Applied Behavioral Science* 47(3): 266-308.

Cameron, Kim and Jon McNaughton. 2014. "Positive Organizational Change." *The Journal of Applied Behavioral Science* 50(4): 445-462.

Covey, Stephen M.R. and Rebecca R. Merrill. 2006. *The Speed of Trust: The One Thing that Changes Everything.* New York: Simon & Schuster.

Kim, W. Chan and Renee Mauborgne. 2017. *Blue Ocean Shift – Beyond Competing Proven Steps to Inspire Confidence and Seize New Growth.* New York: Hatchette Book Group.

Schein, Edgar. 2013. *Humble Inquiry: The Gentle Art of Asking Instead of Telling*. Oakland: Berret-Koehler Publishers.

Taylor, Steve. 2011. *Leadership Craft, Leadership Art.* New York: Palgrave MacMillan.

Weick, K.E. and K. M. Sutcliffe. 2007. *Managing the Unexpected: Resilient Performance in an Age of Uncertainty.* New York: John Wiley & Sons.

Youssef-Morgan, C.M. and Fred Luthans. 2013. Positive Leadership: Meaning and Application Across Cultures. *Organizational Dynamics* 42:198-208.

TRANSFORMING TODAY'S MEDICAL DEVICE/PHARMACEUTICAL INDUSTRY UTILIZING THE BALDRIGE EXCELLENCE FRAMEWORK

Gregory Matz and Christopher Czyzewski
Founding Partners, APEX Performance Excellence Group, LLC

Impetus for change is a constant driver of American business; adaptability and innovation are the cornerstones of growth and development in the modern economy. The unprecedented rate of globalization since the mid-twentieth century has continued to increase pressure for industry to drive competitive outcomes in quality and productivity. History tells us that those that fail to adapt and innovate will be left behind.

Post-World War Two Japan embraced new management principles that enabled unprecedented advances in quality and productivity in automobile manufacturing, (Mazur, Undated) while the American auto industry stagnated by comparison over the same period. Japan's adoption of Deming's "Fourteen Points" and management principles to design, not inspect, quality into a product drove this differentiation. (Deming, 1982) Recognizing the value of Deming's principles, the U.S. Congress passed the Malcolm Baldrige Quality Improvement Act of 1987 (GovTrack, 2020) to recognize performance excellence in top performing organizations.

Analogous to the challenges encountered by the auto industry in the 1980s, today's health care sector must evolve management approaches, tools, and techniques to stay competitive. As health care companies developed more sophisticated products with correspondingly more complex manufacturing processes, the medical device and pharmaceutical industry (MD/PI) lagged in evolving quality tools and management methods. (Fuhr, George, and Pal, 2013) Consequently, product quality has suffered, resulting in greater scrutiny by the FDA as evidenced by a 50 percent increase in recalls and a seven-fold increase in warning letters. (U.S. Food & Drug Administration, 2018) Increasing competition, cost pressures, and heightened compliance risk in the MD/PI highlight the need for a holistic and comprehensive management approach.

The Value of Baldrige

Some key attributes that contribute to the successful and sustainable transformation of management/quality practices include: 1) Culture of close communication and collaboration within the organization; 2) Openness for change and improvement; and 3) Commitment to the long-term vision of transformation and the patience to cultivate sustainable change. These conditions were all present and led to successful transformation in post-World War Two Japan, and they are equally applicable today. Arguably, pressures imposed on corporate America today can detract from success of sustainable transformation. Fiscally-minded companies focus on quarterly earnings and shareholder return. This can cause shortsighted leaders to cut transformation efforts in favor of unsustainable quick hits to drive immediate financial performance. Effective leaders recognize that lasting organizational changes take patience and discipline. They involve continuous management reinforcement and the use of tools and methods that take more time to generate results than some leaders may be willing to accept.

New management practices and work systems based on the Baldrige criteria are foundational to long term success and organizational sustainability. We will describe a high-level framework for enabling companies to successfully navigate the total transformation journey, translating the powerful Baldrige criteria into practical actions with tangible results. Our transformation efforts in MD/PI go beyond regulatory compliance remediation. We catalyze organizational passion through compliance, effectiveness, and efficiency to achieve full performance potential.

Transformation towards Excellence

Many MD/PI organizations experience "remediation fatigue" due to struggling with regulatory concerns over long periods of time and expending large amounts of capital attempting to fix the issues. Over time, this strains the organization financially, and in some cases, impedes growth due to the inability to meet regulatory demands. In a majority of these cases, the management practices that had brought these organizations to a current level were not sustainable to take them to the next level of performance. Despite these challenges, most organizations are surprisingly well positioned for success.

Transformation requires commitment and support from the entire organization. We recognize the Baldrige criteria as a proven framework to assist organizations in creating the holistic direction that leads to a transformed state. Paramount to the direction is the translation of the Baldrige criteria into language that is accessible and actionable. Decades of organizational transformation experience informs us that the best approach to truly understanding and gaining commitment to the Baldrige criteria is to have the organization participate in the design, implementation, and execution of best practices based upon them. Through this practice, key stakeholders are afforded the opportunity to fully understand criteria intent, and therefore become instrumental as change agents in its deployment.

One of the first steps to kick off the initiative includes defining what "transformation" means to the team leading it. We hone in on key areas by utilizing the Baldrige criteria as a framework with an implementation team to further develop the attributes of what is called the "Transformation Model." Over a series of weeks, the team organizes the "Model" into specific sections, illustrated by Table 1.

Table 1 Application of Structural Elements to Transformation Model Categories

Category Structural Element	Element Description
Scope	Thought-provoking questions to challenge the organization to think differently, beginning to allow the current paradign shift of how work gets done to occur.
Overview	A high-level description for each transformation element (category) that is required
Principles	Specific guidance for each aspect of the transformation that provides critical actions that need to be completed in order to achieve the transformational state. These guidelines ensure alignment of all elements required for successful implementation of the transformation.

It is through the very process of developing the Transformation Model that the seeds of a cultural transformation are sown. Idea exchanges and in-depth discussions within the team foster ownership of a culture that embraces the language and pillars of the Baldrige criteria. We have witnessed extraordinary personal development of the individuals participating on the team during this process. As people expand their understanding of the holistic nature of the organizational dynamics, the more informed they become to enable the creation of guiding principles.

Upon completion of the Transformation Model, the team introduces it to key stakeholders and leaders in the organization at a work session designed to gain commitment. Transformation Model categories are introduced to the participants for input and refinement. Importantly, the work session is not intended as an opportunity to reject the model or make drastic changes but rather to refine and drive commitment to the direction. Co-creation fosters ownership, a critical element of instilling commitment by the management team. Additionally, the importance of key stakeholder commitment to the transformation cannot be over-emphasized. Management's dedication and reinforcement are essential to guide the organization through challenges that might arise during the course of implementation and execution. Armed with discipline and patience, the team strives to implement critical aspects of the model in daily operations and activities, illustrated by Table 2.

Table 2 A Phased Approach to Transformation

Transformation Deliverables

Phase I	Phase II	Phase III
● A well-defined process architecture ● Process attributes clearly understood ● Clear definition of process partners' roles and responsibilities ● Draft documentation for process standardization ● Process requirements established ● Initial Identification of process metrics and operating mechanisms for monitoring	● Documentation verification, training, and change control approval ● Regulatory requirements matrix ● Stakeholder requirement, metric, and mechanism alignment ● Metric implementation ● Roles and responsibilities formalized through job descriptions	● Completion of transformation model principles ● Enhancement of strategic planning ● Talent and performance management ● Organizational learning ● Leadership/management development and succession planning

Getting Started – Using a Pilot Program

The most effective transformations begin with a pilot program having a carefully-defined narrow scope. Identifying an area of the company to pilot the transformational change process reduces the magnitude of implementation challenges while at the same time enables refinement of the approach. The implementation team recommends a segment of the organization to pilot a process critical to the organization's bottom line that possesses the following characteristics:

- Strong local leadership
- Experienced management and workforce
- Openness to change and willingness to improve

A successful pilot program establishes a critical link between the transformation effort and key products and services that the organization delivers. Being grounded in the reality of day-to-day operations and focusing on "how work gets done" ensures that the organization does not lose sight of why the initiative exists in the first place. Attempting to fix organizational challenges (especially in highly-regulated environments) by attempting to address "symptoms" vs. root causes often fails due to lack of focus on process – "how work gets done." Quick-fix measures fail to deliver executable and sustainable results. In contrast, the pilot program brings to life the Transformation

Model (based on the Baldrige criteria) that manifests company-specific deliverables and provides management practices that challenge the organization to adhere to those that are required to achieve excellence.

We formally capture "how work gets done" by using very familiar and proven techniques such as process mapping, SIPOC modeling, and other Lean Six Sigma tools. Processes and their attributes are defined, roles and responsibilities are clarified, work standards are established, and metrics are identified. These process anchors provide the stability that is required to prevent reverting back to bad organizational behaviors and inefficiencies, and the clarity that enables flawless execution. These foundational attributes mirror Baldrige criteria requirements in the following categories: Customers, Measurement, Analysis and Knowledge Management, Workforce, and Operations.

After processes are identified and developed, the organization executes the process, defining improvements and running through a few cycles of implementation. By studying and reviewing the effect that the Transformation Model principles have had on the organization's piloted process, the team identifies any improvements to the model and/or the approach. With the confidence that a successful pilot has resulted in the desired transformation, the approach is replicated across the organization.

Full-Scale Implementation

Parallel to initiating a full-scale implementation throughout the company, a second phase of the transformation is begun. This phase focuses on building awareness of the concepts and principles of the transformation model amongst the organization's leadership and management ranks. This is accomplished by:

1. Incorporating values, competencies, and management practices into Strategic Planning and Talent & Performance Management processes.
2. Managing the organization by understanding process requirements through the various "voices" (Customer, Business, Process and Workforce).
3. Establishing metrics and their respective review mechanisms.

These concepts and principles are integrated through their respective "management enabling" processes that are developed in much the same way as key operational processes. These foundational practices correspond with Baldrige criteria in the following categories: Leadership, Strategy, Customers, and Measurement, Analysis, and Knowledge Management.

The last phase in the transformation initiative is to establish a mechanism that enables knowledge transfer and engagement opportunities within the organization. Robust training and educational programs are established that drive long term results and sustainability. This is accomplished through a “boot camp style” learning format or module training, whichever the organization feels is better aligned with the culture, environment, and staff. Identification and coaching of key contributors as Baldrige Examiners™ may be considered. It is important to identify future leaders, both formal and informal, as tomorrow’s mentors, instructors, and initiative coaches. These capstone activities correspond with Baldrige criteria in the following categories: Strategy, Workforce, Operations, and Results.

Conclusion and Summary

We believe that the Baldrige criteria are an answer to addressing the economic, financial and regulatory conditions that are challenging the MD/PI today. These criteria provide a holistic framework to build a transformation model, affording organizations with a comprehensive business model and management practices to enable desired performance outcomes.

Critical to utilizing the criteria as a framework is the realization that the organization benefits from facilitated exercises taking leaders through a journey of discovery of the criteria. It is beneficial for leadership to engage their work system and create a transformation model to which they will fully commit. We recommend that this journey begins with “a focus on how work gets done” (Operations). Once the organization has identified and established rigor to its key processes, a focus turns to understanding requirements (Customers). The development of metrics and corresponding review mechanisms is next (Measurement, Analysis, and Knowledge Management). Once the organization has a foundation of well-defined processes and fact-based performance indicators, short- and long-term planning (Strategy) can provide the organization with direction. The organization is now well-positioned to define itself (Leadership), to generate enthusiasm, excitement, and commitment from within (Workforce), and to achieve its performance potential through process excellence. Done correctly, the capstone to the initiative is positive trending of key performance indicators (Results).

Just like anything in life that is worth the effort, this approach requires commitment – a commitment to the framework of the Baldrige criteria and a disciplined application of process excellence tools. It is not a journey for the easily distracted or impatient leadership team. There may be multiple temptations to abandon the initiative and resume old behaviors and practices, as time is needed to manifest positive trends. The leadership team must embrace discipline, patience, and courage. Discipline to the rigor of the approach, patience that the initiative will yield results, and courage in the face of the impatient detractors. The medical device/pharmaceutical industry is intrinsically linked to improving and saving lives. The ability to deliver high quality products and services that serve patients is a noble effort that demands commitment to excellence. The Malcolm Baldrige National Quality Award is perfectly suited for that effort.

References

Deming, W. Edwards. 1982. *Out of the Crisis*. MIT Press.

Fuhr, Ted, Katy George, and Janice Pal. 2013. "The Business Case for Medical Device Quality", *McKinsey.com*, https://www.mckinsey.com/~/media/McKinsey/dotcom/client_service/Public percent20Sector/Regulatorypercent20excellence/The_business_case_for_medical_device_quality. Accessed 10 May 2020.

GovTrack. 2020. "H.R. 812 - 100th Congress: Malcolm Baldrige National Quality Improvement Act of 1987", https://www.govtrack.us/congress/bills/100/hr812. September 20. Accessed 06 June 2020.

Mazur, Glenn. Undated. "Deming Influence on Post-War Japanese Quality Development", *QFD Institute*, http://www.qfdi.org/newsletters/deming_in_japan.html Accessed 19 May 2020.

U.S. Food & Drug Administration. 2018. "Medical Device Enforcement and Quality Report." https://www.fda.gov/media/118501/download. Accessed 10 May 2020.

GUIDELINES FOR AUTHORS

All submissions should be sent via email to the editor at chronicle@baldrigefoundation.org. Please state whether your paper should be considered as a *Feature Article* or as a *Leadership and Management Perspectives* piece. *Feature Articles* are intended to provide original and useful information of interest and practical significance to organizational leaders, and which are grounded in experience, innovative thought, and appropriate literature research. Executive summaries of feature articles are provided as brief overviews of these articles to assist readers. *Leadership and Management Perspectives* provide specific points of view designed to support understanding or to provide insights about current issues, emerging issues, Baldrige challenges, implementation strategies, best practices, and similar topics. These are typically shorter than feature articles.

All submissions should draw upon the concepts and philosophy of the Baldrige Excellence Framework and must provide useful information of interest to organizational leaders.

Highly technical papers of limited scope or academic-type papers are not appropriate. Manuscripts submitted to the *Chronicle of Leadership and Management* must be original works not previously published or under review by another publication.

Types of articles suitable for publication in the *Chronicle of Leadership and Management* include, but are not limited to, the following:

1. *Case studies* that highlight role model practices or implementation strategies for performance excellence, drawing upon Baldrige principles.

2. *Innovative and insightful discussions* about Baldrige categories, items, areas to address, or key (and difficult to understand) criteria questions that provide practical value.

3. *Articles that translate cutting-edge research literature into practical language* that would be applicable and useful to practitioners and may contribute to leading-edge validated practices in the future.

4. *Thorough and comprehensive review articles* that provide clear and unique perspectives on a significant topic.

Submission Requirements

Papers should be of the style of journals such as the *Quality Management Journal*, *Harvard Business Review*, or *Sloan Management Review*, and should include appropriate references. They should not be as informal as those published in magazines such as *Quality Progress*. There are no minimum or maximum length restrictions. Say what is necessary to get your message across fully; however, we may ask you to shorten the paper if necessary. *Feature articles* must be accompanied by an Executive Summary of about 250 words and a bullet list of 4-6 takeaways that summarize key points. This does not apply to *Leadership and Management Perspectives* submissions.

References

References should be listed in alphabetical order using *The Chicago Manual of Style*, 16th Edition. Examples:

Book

Grazer, Brian, and Charles Fishman. 2015. *A Curious Mind: The Secret to a Bigger Life*. New York: Simon & Schuster.

Smith, Zadie. 2016. *Swing Time*. New York: Penguin Press.

In-text citations: (Grazer and Fishman 2015, 12), (Smith 2016, 315–16)

Journal article

In the reference list, include the page range for the whole article. In the text, cite specific page numbers. For articles consulted online, include a URL or the name of the database in the reference list entry. Many journal articles list a DOI (Digital Object Identifier). A DOI forms a permanent URL that begins https://doi.org/. This URL is preferable to the URL that appears in your browser's address bar.

Keng, Shao-Hsun, Chun-Hung Lin, and Peter F. Orazem. 2017. "Expanding College Access in Taiwan, 1978–2014: Effects on Graduate Quality and Income Inequality." *Journal of Human Capital* 11, no. 1 (Spring): 1–34. https://doi.org/10.1086/690235.

LaSalle, Peter. 2017. "Conundrum: A Story about Reading." *New England Review* 38 (1): 95–109. Project MUSE.

In-text citations**:** (Keng, Lin, and Orazem 2017, 9–10), (LaSalle 2017, 95)

Consult https://www.chicagomanualofstyle.org/tools_citationguide/citation-guide-2.html

for further information and examples of book chapters, website content, etc. References should be cited in the paper in parentheses; do not use footnotes or endnotes.

Figures and Tables

Authors must provide a high-resolution file (pdf, jpg, or png) for each figure and table in their manuscript. The *Chronicle* is published in black and white, so all figures and tables must be in black and white or grayscale.

Review Process

Each submission will be reviewed by at least two members of the Editorial Board who evaluate the article based on the following attributes:

1. *Contribution to knowledge.* Does the article present innovative or original ideas, concepts, or results that make a useful contribution to knowledge of performance excellence?
2. *Significance to practitioners*. Are the concepts discussed of practical significance and meaningful to organizational leaders and managers?
3. *Readability and clarity*. Is the article well organized and presented in a clear and readable fashion that will be understood by a wide audience?
4. *Figures and tables*. Are figures and/or tables used appropriately to enhance the ability of the article to summarize and/or communicate information and conclusions?
5. *Organization and style.* Is the content of the article logically organized? Are the title and Executive Summary, if applicable, representative of the article's content?

Prospective authors should use these attributes as a checklist in reviewing their manuscript prior to submission to improve the likelihood of acceptance. We try to complete reviews within a month of submission.

About The Foundation for the Malcolm Baldrige National Quality Award, Inc.
Institute for Performance Excellence

The Baldrige Foundation is the private-sector partner of the Baldrige Performance Excellence Program (BPEP), a federal program in the National Institute of Standards and Technology within the Department of Commerce. The Mission of the Baldrige Foundation is to ensure the long-term financial growth and viability of BPEP, and to support organizational performance excellence. The Institute for Performance Excellence is a thought leader on performance excellence, leadership, and management. Our team carries out this mission in a number of ways: undertaking research projects, hosting conferences and activities, conducting executive-level training, and publishing and distributing a wide variety of educational materials. Its mission is to improve the practice of leadership and management in pursuit of performance excellence and its impact in an ever-changing world.

To learn more about the Baldrige Foundation or Institute for Performance Excellence, please contact Josh Racette, Executive Director of Corporate Development, at (202) 559-9195 or jracette@baldrigefoundation.org. The Baldrige Foundation is recognized by the Internal Revenue Service as a 501(c)(3) tax exempt organization. Your donations and contributions are tax deductible. To learn more visit www.baldrigefoundation.org. To learn more about BPEP visit www.nist.gov/baldrige