Baldrige Research Project

November 11, 2021

Using the Baldrige Excellence Framework to Improve Organizational Resilience and Sustainability

Baldrige Research Team

Janice K. Garfield, PhD, Team Leader

Faculty, DBA Consulting Capstone, College of Management and Technology

Walden University

Meridith K. Wentz, PhD, Core Team

Assistant Chancellor, Planning, Assessment, Research, & Quality

University of Wisconsin-Stout (Baldrige Award recipient)

Contributing Faculty, DBA, College of Management and Technology

Walden University

Audrey D. Butlett-Swenson, MLIS, Core Team

Liaison Librarian to College of Management and Technology and Instruction Coordinator

Walden University

Kevin Wilkinson, EdD, Core Team

Program Director/Assistant Professor, College of Science, Technology, Engineering,

Mathematics, and Management

University of Wisconsin-Stout (Baldrige Award recipient)

Gary Zack, DBA, Research Team

Director of Information Technology, Geisinger Health System

Alumnus, Walden University

Michael Dillard, DBA, Research Team

CEO, Dillard Global Coaching and Leadership Development Institute

Alumnus, Walden University

Recipient, Dr. Curt Reimann Baldrige Scholarship, Foundation for the Malcolm Baldrige

National Quality Award

Suzanne Collins, DBA, Research Team

Information Technology Manager, Plasser American Corporation

Alumna, Walden University

Inaugural (2018) recipient, Dr. Curt Reimann Baldrige Scholarship, Foundation for the Malcolm

Baldrige National Quality Award

Andria Coleman, DBA, Research Team

Food and Nutrition Manager/General Manager, Sodexo North America

Alumna, Walden University

Examiner, National Quality Award Program, American Health Care Association/National Center

for Assisted Living (AHCA/NCAL)

Adrienne D. Adkins-Provost, DBA, Research Team

Vice President of Strategy Implementation, Freseneius Kidney Care

Alumna, Walden University

Allen R. Turner, DBA, Research Team

Emergency Management Specialist, NASA Glenn Research Center

Alumnus, Walden University

Recipient, Dr. Curt Reimann Baldrige Scholarship, Foundation for the Malcolm Baldrige

National Quality Award

Susan McKeon, DBA, Research Team

Chief Financial Officer/Associate Laboratory Director for Business Services Directorate,

Brookhaven National Laboratory

Alumna, Walden University

Foundation of the Study

Established through the Malcolm Baldrige National Quality Improvement Act of 1987, the Baldrige Performance Excellence Program at the National Institute of Standards and Technology, an agency of the U.S. Department of Commerce, is dedicated to helping organizations improve performance outcomes and succeed in a global marketplace. The Baldrige Performance Excellence Program administers the Malcolm Baldrige National Quality Award, the nation's only Presidential award for organizational excellence. The Baldrige Performance Excellence Program also publishes the regularly revised Baldrige Excellence Framework, which includes the Criteria for Performance Excellence, the basis for applicant evaluations for the Baldrige Award. The Baldrige framework encompasses criteria in seven key areas of performance and is published in three sector-specific versions, allowing leaders of organizations of any size and sector to assess their operational approach. Leaders who use the Baldrige framework and criteria to inform and guide operations and improve results have opportunities to improve performance and achieve organizational sustainability and resilience.

State-level and regional Baldrige-based award programs, united through their membership in the nonprofit Alliance for Performance Excellence, partner with the Baldrige Performance Excellence Program to extend the reach of the Baldrige framework throughout the United States and around the world, and the nonprofit Communities of Excellence 2026 also trains communities in the use of a community-adapted, Baldrige-based framework.

Never Waste a "Good Crisis"

The COVID-19 pandemic created a manifold crisis, and the world responded to the incalculable social, economic, and structural damage wrought by the virus. Whether the COVID-19 exigency continues through a succession of virulent variants or is followed by subsequent crises, individuals and organizations across all sectors have an opportunity to learn from the leaders of Baldrige framework-using organizations that triumphed through the adversity of the COVID-19 pandemic regarding how use of the Baldrige framework can impact organizational sustainability and resilience.

At the request of leaders of the Baldrige Performance Excellence Program and the Alliance for Performance Excellence, our research team conducted an intensive qualitative study based on multiple cases to explore how the use of the Baldrige framework throughout various industries impacts organizational sustainability and resilience. We focused on the experiences of leaders in multiple economic sectors (e.g., health care, government, nonprofit, education, business, service, and manufacturing) and included leaders from communities participating in Communities of Excellence 2026 (see Figure 1).

Research Participant Sector Representation
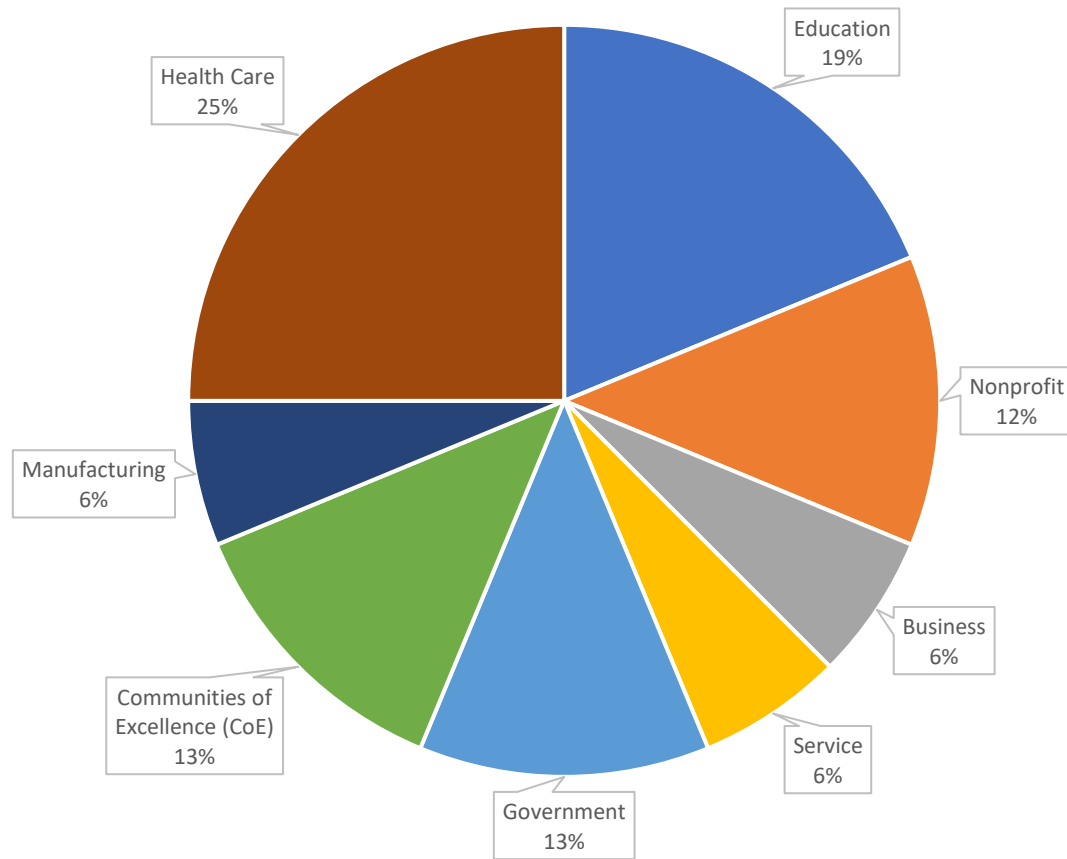
Figure 1. Sectors represented in this study.

Introduction

The Baldrige framework has played a significant role in the practice of quality operational management in the United States and overseas. The framework is nonprescriptive and allows leaders of organizations in every sector to become aware of the importance of assessing the maturity of their current operational approaches.

The assessment of performance in each category of the Baldrige framework allows organizations to improve quality by overcoming operational challenges. Evidence documented by Baldrige framework-using leaders describing advantages of implementing performance-excellence practices illustrate how leaders can better address specific organizational needs. The concept of continuous improvement empowers organizations to use their resources to focus on accomplishing their missions with excellence through business system improvements, which often involves use of decision tools. Such tools include Lean methodology, Six Sigma, W. Edwards Deming's plan-do-check-act methodology, standards of the International Organization for Standardization, or other improvement measurements. These may be used to assess consumer quality, delivery, and cost expectations. The Baldrige framework asks organizations to identify characteristics such as their service offerings, values, culture, assets, regulations, resource structure, stakeholders, partners, collaborators, and customers; ensuring understanding of these key elements helps organizations identify performance gaps and shift their focus to improvement requirements.

Conceptual Framework

The conceptual framework for this study was general system theory (GST), which originated in the published writings of Ludwig von Bertalanffy in 1968. Researchers use GST to study how different interrelated business perspectives affect other business components that change the whole system for better performance (Saurin, 2021). Researchers also use GST to understand variables within existing processes to learn how to improve outcomes and reduce costs by enhancing service and product quality, as well as increasing the speed of performance (Valentinov et al., 2021). The GST approach facilitates use of a continuous and sequential cycle

that involves (a) developing multiple business objectives and disparate logics; (b) identifying, scrutinizing, measuring, and prioritizing processes to reduce risk; and (c) improving process performance by identifying traditional inadequacies (Valentinov et al., 2021). Researchers can use GST to understand existing processes to explore the criticality of maintaining an open cognitive system, which depends on relationships in the organization's internal and external environment. The critical factor for our selection of GST was the theory's history of enabling open workflow value creation to improve outcomes related to organizational sustainability and resilience.

Methodology

Sixteen leaders of Baldrige Award recipients and organizations that earned Category Best Practice recognition (at the annual Baldrige Award ceremony) were interviewed by 11 interviewers using nine open-ended questions. The leaders were identified by Baldrige Performance Excellence Program, Alliance, and Communities of Excellence leaders; consideration was given to representation of the different sectors that had achieved Baldrige Award-related recognition within the last decade. Each participant represented a different organization, with no overlap between organizations or participants. Participants were sent an email requesting their participation in the study. Leaders self-selected by responding to the email with their consent to participate in the study. Demographic characteristics of the participants were not a focus of the selection process, so the participants' diversity was random. Participants were identified as being part of the executive leadership in their organizations. Interviewers were assigned to participants to conduct the interview based on their and participants' availability. Interview questions were developed to frame the conversations and reduce redundancy.

Interviews were conducted virtually using Microsoft Teams interactive video software. Interviews were recorded, and the transcription function in Microsoft Teams was used to document the conversations for later analysis of themes.

Interviewers summarized responses and developed a list of themes. The research team members collaboratively refined themes to reflect their multiple perspectives and interpretations as a multidisciplinary group to manage and control varying interpretations of the data (see Curry et al., 2009). The team's 16 themes were then applied to the summaries of each response by the interviewer assigned to the participant. A research team member reviewed the summarized interview responses and compared the assigned coding to ensure consistency and appropriateness of the coding. Responses were then grouped by code and sorted using Microsoft Excel, a method described by Ose (2016).

<div align="center">

Interview Data

</div>

An Integrated Framework and Systems Approach—There Is No Turning Back

The 2021–2022 Baldrige Excellence Framework comprises 58 pages and about 275 questions, which is considerably fewer questions than posed in earlier iterations of the framework. Nonetheless, organizational executives and senior leaders find the prospect of implementing the Baldrige framework and criteria to be daunting due to the level of detail. The leaders of Baldrige framework-using organizations interviewed for this study found ways to overcome initial hesitancy and resistance.

The process of adopting the Baldrige framework to manage an organization's operations appears to be characterized by gradual understanding. The CEO of an Alliance program top-tier award-winning organization observed

> early on, I think people were skeptical. . . . Over time, they have seen how it works. The Baldrige framework focus on process and, importantly, understanding the alignment and integration of multiple processes ultimately wins over even the toughest critics.

The city manager of a Baldrige Award recipient organization noted "that's the continuous improvement piece. Approaches change over time—we continue to improve." The CEO of an Alliance top-tier award-winning organization also observed that "the companies that are behind Baldrige are better, and morale is higher. I always say it's all about continuous improvement."

Believing in the North Star

A systems perspective—that is, managing all components of an organization as a unified whole to achieve mission, ongoing success, and performance excellence (Baldrige Performance Excellence Program, 2021)—is a Baldrige core value. Adopting such a perspective is an essential part of using the Baldrige framework, although bringing the systems theory to practice requires a fundamental trust in the vision of what an organization wants to be in the future—and it may involve risk. The president and CEO of a Baldrige Award recipient organization noted "the framework became the thing to focus on . . . because it is an organized systems approach. From our perspective, this was a leap-of-faith-concept." Another leader participating in the interviews for the current study used the metaphor of the North Star and its companions in orbit,

referring to strategic planning as the organization's North Star. Nawaz (2021) explained that what employees sometimes mean when they say that their organization has no North Star is that organizational decisions and behaviors do not appear to align with commitments described in the organization's mission, vision, and values.

Sometimes, when vision and strategies reflect a 30,000-foot view, those operating at ground level find it difficult to grasp the connection to their daily responsibilities. The power of the Baldrige framework to rivet focus on making connections between operations and goals was noted by several leaders in the current study, including leaders of Baldrige framework-using organizations involved in Communities of Excellence 2026. For example, a director of strategy and innovation for a recognized Community of Excellence noted the following:

> The biggest opportunity that we have seen with the framework is tying everything we do to strategy. . . . We started using Baldrige in the community in 2016 and can see the positive changes in the strategic planning process—doing it under a new lens and obtaining input to ensure we are current with the needs of the community. Deploying the strategy through workgroups with specific priorities led to great outcomes, great partnerships, and great connections. Strategic planning has become intentional. The framework has driven change around resiliency and sustainability within our strategic planning.

Know Where You're Going, or You'll End Up Someplace Else

Many of the leaders interviewed in the current study identified strategic and continuity planning as central to achieving organizational sustainability and resilience. A leader whose organization has received multiple Baldrige Awards noted "the Baldrige process has embedded within it the necessary assessment tools for approaches to sustainability." Learning is a key concept embedded in the Baldrige framework and is an integral part of the strategic planning process. Several organizational leaders mentioned that learning from previous events and then adjusting to improve processes required discipline as they tested real-life events, conducted after-action reviews to memorialize lessons learned, communicated new information, and documented and updated systems and protocols. A Baldrige Award recipient from the education sector stressed "the single most important part of the Baldrige framework that we used for continuity planning was our ability to test and then learn." The executive director of a Baldrige Award-winning organization stated, "we have a regular strategic planning cycle and continuous process improvement approach." That leader added "strategic planning is the big one, and performance improvement is the smaller one. We are constantly relooking and rethinking everything from the bottom up and asking, 'Has the world changed?'"

Leaders interviewed in the current study also revealed that by focusing on a systematic approach to strategic planning, the Baldrige framework helped their organizations ensure business continuity in the face of disasters and emergencies. The leader of a Baldrige Award-winning organization said

> the Baldrige framework causes us to have robust business continuity and recovery plans. [When the COVID-19 pandemic hit], we were ready to go remote with a flip of the

switch because one of the things that Baldrige did for us was make us insane planners . . . not so insane when you get down to it.

Such comments revealed that the Baldrige framework helped the leaders create agile organizations that could make rapid changes as conditions changed; using the framework continuously reinforced systems thinking and the understanding that changes in one part of the organization affect other parts.

According to the interviews, using the Baldrige framework to ensure that leaders employ a systems perspective can lead to managing the organization as an ecosystem. The enterprise transformation vice president for an organization that has received multiple Baldrige Awards said

> [we] perform as an organism. The organization has a soul. It's a feeling, an entity [that] feels bigger than an organization. [The] organization has an emotional response to things . . . we care for one another . . . your outputs are my inputs . . . your pain points become mine.

When an organization adopts a systems perspective, senior leaders focus on strategic directions and customers (Baldrige Performance Excellence Program, 2021). The city manager of a Baldrige Award winner explained

the Baldrige framework [is] holistic, from a leadership system perspective, because it hits

all categories. We employ a systems-thinking perspective . . . we're very intentional

about measuring what's important. We shifted from static to systematic processes

through the Baldrige framework . . . across all of our service areas.

You Don't Have To Be Good at Everything—Focus On What's Most Important

The interviewed leaders of organizations that use the Baldrige framework to achieve and sustain

high performance agreed that organizations do not need to be equally excellent in all criteria

elements. The CEO of an Alliance program top-tier award-winning organization said, "I think

the trifecta of [Baldrige categories] Leadership, Workforce, and Customers, and the overlay of

Strategy, is what helped us sustain [high performance] . . . we actually thrived." The president

and CEO of a Baldrige Award-winning organization observed "[the] Baldrige framework helped

us pick out . . . the most effective elements. . . . The Baldrige framework focused on how to

improve the things we do best." The executive director for planning, research, and organizational

development for a Baldrige Award-winning organization advised "if you've done good strategic

planning, you know what the 'gotta have' list is . . . you've got a priority list."

Measure What Matters

Tushman et al. (2017) noted that organizations need to use data science for change management.

Leaders of Baldrige Award-winning organizations agreed. Developing a robust collection of

diverse and meaningful measures is not quick, easy, or one and done; instead, the collaborative

process of capturing data and building dashboards that reflect the organization's priorities,

competitive position, and future plans may evolve over several years. The chief operating officer

of a Baldrige Award winner noted "in our dashboard reporting . . . we are looking at major indicators in every aspect of the business on a regular basis. . . . Ultimately, the effectiveness of our organization is assessed based on achieving our strategic goals and objectives." A Baldrige Award-winning organizational leader in the education sector explained "every department has developed what we call vital signs [that are] trended daily, weekly—whatever is appropriate."

One way to engage a workforce in using data is to demystify what is happening by exploiting, spotting, and using patterns as the basis for action, and then monitoring/analyzing the habits of potential customers to discern their interests and needs (Wheelan, 2018). The chief operating officer of a nonprofit organization that has won the Baldrige Award observed

> the usefulness of the Baldrige framework is demonstrated in what we have been able to achieve. . . . I think one of the most important things we have done is use after-action reports. That has done two primary things: It has allowed the staff to understand that it is okay to make mistakes . . . and you need to learn from it. It is one thing to say it, but another thing to put this in practice. As we learn from it, we adjust our policies and procedures. That, to me, when it is all said and done as it relates to resilience and the organization, has been one of the most important things we have gotten out of Baldrige. This is also supported by our dashboard reporting, where we are looking at major indicators in every aspect of the business on a regular basis.

Leaven the Whole Lump

Leaders of Baldrige Award-winning organizations noted that embedding the Baldrige framework and criteria into the organization's culture is essential to continuous improvement, organizational sustainability, and resilience. Some leaders said they have adopted a grassroots approach to implementing the Baldrige framework. The executive director for organizational development of a Baldrige Award winner explained

> at the beginning, we did it at the department and process level. We said, 'Just do it for your sphere of influence; try to answer those questions.' And then we built out from that so that people could be in their personal space and knowledge. And once they got into the vocabulary and everything, they could move to cross-functional teams and, eventually, [to using the framework throughout] the entire organization.

The managing principal engineer of a manufacturing company participating in an Alliance program noted that the organization "does not have specific people doing Baldrige or spending additional time on Baldrige separate from running the business." That organization integrates Baldrige's core values and criteria into its business model. One of the leaders interviewed mentioned that the Baldrige framework is the organization's operating system; whenever the Baldrige Performance Excellence Program updates the framework and criteria, the organization makes changes, too. An added benefit of embedding the framework into organizational culture, according to that leader, is that everyone in the organization uses the same vocabulary and adopts a common language.

Mastering the Baldrige vocabulary can be a first step in centering an organization's workforce on the Baldrige framework and criteria, according to the leaders interviewed. Members of the Board of Examiners for the Malcolm Baldrige National Quality Award often acknowledge the value and challenges associated with developing fluency in Baldrige terminology. The nurse manager of an Alliance program top-tier award-winning organization noted

> staff had to unlearn internal use of terms and relearn them in the context of Baldrige. . . . To answer the [criteria] questions, they needed to interpret responses using the Baldrige glossary. . . . To operationalize the framework, we relied on SMEs [subject matter experts] to translate the conversations and provide a level set while filling out the application.

Processes—by Any Other Name . . .

The issue of embedding the Baldrige framework into organizational culture frequently emerged in conversations with leaders of Baldrige Award winners participating in this research. Organizational leaders attributed their improved sustainability and resilience to integrating Baldrige into their culture, although it was not always easy. The leader of an organization that has received more than one Baldrige Award noted "processes were not identified as a 'Baldrige' thing, but as a [organization name] thing." The superintendent of an Alliance program top-tier award-winning organization described it this way:

> The board believes that here's what we're going to do based on best research practices to drive academic/organizational practices through Baldrige. This is what we ought to be

doing. If you want to come to [organization], you're going to commit to the

[organization] way. [Organization] was quite successful; we were not struggling as an

organization, so there was a resistance and hesitancy to really adopt and work and engage

in the framework early on. As people began to realize the gaps in some of the responses

to the questions, buy-in started to occur.

That leader also explained that using the Baldrige framework to assess the organization exposed

the gaps and led to embedding Baldrige into the organization's culture.

Focus on the Journey

The interviewed leaders of Baldrige Award-winning organizations agreed that applying the

Baldrige framework is a journey. Each organization's journey will be different. The director of

strategy and innovation for a Community of Excellence stated

at the beginning, there was fuzziness about the entire process. . . . It required a heavy lift,

with partners taking notes and providing feedback that was then discussed with the entire

leadership team. The iterative nature could be a little off-putting to the stakeholders;

keeping them engaged is extremely important.

The president and CEO of a Baldrige Award winner observed "listen to what is important. Allow

every staff member to ask, 'How can I participate and make things better?'" Those leaders made

clear that stakeholder buy-in is essential when attempting to integrate Baldrige into daily

operations and organizational culture.

Bring Everyone to the Table

Customers are essential assets of any organization providing service based on the dependent

relationship between value creation for the customer and the organization (Evert de Haan &

Verhoef, 2015). Evert de Haan and Verhoef (2015) noted that alignment between customer needs

and organizational objectives creates success for the organization. Additionally, there is a strong

correlation between customer reviews and organization sales.

According to the leaders interviewed in the current study, performance excellence requires

constantly building relationships and harnessing outcomes through feedback and engagement.

"Feedback is a gift; you cannot miss the feedback and evaluation loop" commented the chief

executive of an Alliance program top-tier award-winning organization, further reinforcing the

importance of customers and stakeholders, who are the ultimate judges of organizational

performance and quality of organization services. A recurring phrase used by the interviewed

Baldrige leaders in their description of organizational resilience and sustainability through

challenges was "honor the voices of the customer, communication, and culture." Leaders

interviewed also indicated that voice-of-the-customer data allow leaders to gain firsthand

knowledge and information regarding customer needs and preferences, leading to improved

services and performance. Recovery from accidents, service errors, and mistakes, as well as

adapting to disruptions, is crucial in retaining and engaging customers in the longer term.

Improvements and learning based on customer-initiated feedback can be challenging based on

categorization (Birch-Jensen et al., 2020). In regard to sharing information, the leader of an Alliance award-winning organization commented "I try to incorporate incredibly valuable feedback, honest feedback." The importance of customer-focused excellence cannot be overemphasized because customers' needs and satisfaction are useful for decision-making processes that address the allocation of resources, processes, and future investments (Di Pietro et al., 2013).

As the interviewed leaders demonstrated, senior leaders play a key role in creating value for all stakeholders and in keeping stakeholders engaged. According to the Baldrige framework (Baldrige Performance Excellence Program, 2021), stakeholders include all groups that are or might be affected by an organization's actions and success, including customers, the workforce, partners, collaborators, governing boards, stockholders, donors, suppliers, taxpayers, regulatory bodies, policymakers, funders, and local and professional communities. Promoting stakeholder engagement, involving stakeholders in key processes, and eliciting their feedback is essential to integrating Baldrige into an organization's culture. The leader of an Alliance program top-tier award-winning organization in the education sector observed "people within the system own the work. You can't do it alone." That leader added

> we have to have as many people in the mix as possible. . . . You can't proofread your own work. You can't address what you can't see. Get new people in—we try deliberately to search for new and old. We are constantly aware that the whole process is intended to be a search for intelligent life in the universe.

Such statements indicate that to embed Baldrige into organizational culture involves engagement at all levels of the organization. In doing so, an organization may witness large-scale change.

We Are the Change We Seek

The leaders interviewed for this study suggested that embedding the Baldrige framework in an organization is transformational. The executive director of a Baldrige Award-winning organization observed

> the Baldrige criteria mobilized everybody; everyone knows the criteria—from the mail center to the executive suite—everybody understands what we do and why we do it—and Baldrige is responsible. People have a sense of ownership and are proud.

The leader of an Alliance program top-tier award-winning organization noted "Baldrige has helped us to understand. Don't panic because we're asking more. Thoughtfully plan and learn from each other. . . . [We] chose a sustainable goal. No one has panicked and fled."

Things Take Time

The interviews with leaders of high-performing organizations suggested that "Baldrige grows on you." The executive vice president and chief operating officer of a Baldrige Award winner observed "at first, people looked at this as theoretical exercises. And then, as soon as you start to apply it to a real-world situation, it became real." The leader of an organization that has won the Baldrige Award multiple times reflected "my understanding of the framework grew over time." According to that leader, an organization's ability to grow into the framework can be facilitated

by familiarity with a variety of tools to improve organizational performance management, such as Lean, Six Sigma, and Total Quality Management, that can be applied while also using the Baldrige framework. That leader further noted "we were doing things well before Baldrige that aligned with the framework. Baldrige was an extension of what we were already doing. It validated what we were already doing. . . . [We] grew into the framework."

Getting People on the Right Bus

Organizational success depends on an engaged workforce that benefits from meaningful work, clear organizational direction, the opportunity to learn, and accountability for performance (Baldrige Performance Excellence Program, 2021). Leaders interviewed in the current study noted the value of having the "right people on the bus." As the executive director of a Baldrige Award-winning school put it, "[we] have to have the right people doing the right jobs. . . . We need the right people in the right places." Several leaders spoke of workforce support and training as being essential to "taking care of your employees so they can stay with you and handle it all. . . . You've got the right people on the bus talking about the root cause of any problem." Similarly, the president and CEO of a Baldrige Award-winning organization in the health care sector advised "unleash the power of asking frontline employees to understand issues and, perhaps, solutions. There is great potential in the workforce to support the right thing to do." Another leader of a Baldrige Award-winning organization in the service sector recommended considering the "talents of people in terms of their native intelligence, their analytical ability, their functional and technical skills set, and their ability to work with one another [and] build relationships and rapport with clients." According to those leaders, a commitment to employees is imperative in building a culture of excellence.

Equally important to interviewed leaders is the value of a focus on excellence. The city manager

of a Baldrige Award-winning organization noted "we had a good organization with hard-

working, competent people. We inherited some amazing stuff, but we didn't have intentionality."

That leader also stated "I had very good people around. We agreed to pursue excellence because,

if we're pursuing average, then we are fundamentally disconnected." In the interviews, leaders

affirmed that sometimes valuing people meant helping them find their place within another

organization. The concept of having the right people on the bus meant that the organization had

to have processes in place to evaluate talent and performance. Performance-related problems

necessitated immediate interventions that corrected performance deficiencies. The interviews

supported the idea that at the core of organizational sustainability is individual performance and

ensuring that the organization's greatest assets—people—are functioning at their highest

potential. The leaders expressed the importance of accountability to achieving high performance.

Accountability and Discipline

Leaders of Baldrige Award-winning organizations described their pursuit of excellence as being

disciplined and rigorous. The executive director of a Baldrige Award-winning organization

observed

> the way approaches have changed over time is that they've become more disciplined. We
>
> have learned from repeated success that [these approaches] can't be 'one and done.' We
>
> believe in the rigor—wash, rinse, repeat. We have found that you keep discovering new

things—there IS something new under the sun every year. You can only be resilient and

sustainable . . . if you follow the instructions of the framework.

Leaders interviewed also implied that to "follow the instructions of the framework," it is

necessary to hold everyone in the organization accountable for their individual performance.

Leaders affirmed the importance of accountability and high expectations in pursuing

performance excellence, in one case mentioning that to strengthen their organization's

accountability system, they introduced the concept of cascading evaluations. The superintendent

of an Alliance program top-tier award-winning organization observed

> this is the work of the strategic plan. The evaluation tool begins at the board level; we
>
> hold you accountable through monthly report-outs, weekly briefings to the board,
>
> quarterly reports—part of the cascade is knowing when it is time for your report.

Hold Fast

Leaders explained that a steadfast commitment to using the Baldrige framework is essential to

sustaining performance improvement. The leader of an organization that has earned multiple

Baldrige Awards said "we have stayed with the Baldrige framework for a long time. We

sometimes struggle with the details, . . . but I am a believer in the framework." That leader noted

that, after using the Baldrige framework for a decade,

> by 2012, we weren't as diligent about it as we had been in the past, and the organization
>
> had changed—for example, doubled in size. It was time for a basic checkup. . . . We

[submitted a Baldrige Award] application and got humbled. Our results were not as good [as in previous Baldrige Award applicant feedback].

According to several leaders, a commitment to sticking with use of the framework is key. A Baldrige Award-winning organization's leader explained "I have never questioned whether we will continue to use the framework." Similarly, the leader of a Baldrige Award winner in the nonprofit sector admitted "Baldrige is hard. It can be expensive. It looks rigid, but in fact it's actually allowed us during these really rough times to thrive."

Innovation

Excellent organizations generate increased value and performance levels through continual improvement and systematic innovation by harnessing the creativity of their stakeholders (Jankalová & Jankal, 2020). Innovation is, therefore, an integrated part of organizational success and an essential function of market adaptation and change. The Baldrige Performance Excellence Program (2021) characterized innovation as a key element of the Baldrige framework's *focus on success and innovation* core value. Further, the Baldrige Performance Excellence Program defined innovation as meaningful change to improve services, programs, processes, operations, and service delivery models with the purpose of creating new value for stakeholders.

Building on the systems perspective, market adaptation and its relationship to innovation may be amplified by changes and challenges within and outside the organization. For example, the CEO of an Alliance program award-winning organization described how the use of the Baldrige criteria drove innovation and facilitated the creation of "a call distribution center that allowed

care center folks to take calls from home" during the COVID-19 pandemic. A hallmark of high-performing organizations is the ability to pivot rapidly and change organizational work systems based on environmental challenges. Another Alliance program award-winning organization's leader described harnessing the opportunity of innovation and leveraging the organization's bandwidth to implement an

> SOS program, which is a peer support program throughout the hospital. . . . We physicians, psychiatrists, counselors, volunteers—any person in the organization that has an issue or problem, or is at wit's end or stressed—can call and be matched with someone confidentially and get help.

The importance of innovation is underscored in the Baldrige framework in several categories, including Leadership; Strategy; Measurement, Analysis, and Knowledge Management; and Operations. Jankalová and Jankal (2020) noted that innovation is a collaborative effort and requires participation from all stakeholders. Employees need to be passionate about innovation. Senior leaders should be able to guide, inspire, motivate, and encourage the entire workforce to contribute, develop, and learn to be innovative.

The interviews with Baldrige leaders indicated that they recognized the value of innovation as a connective part of their daily work systems and processes and used these opportunities to their advantage. One CEO of an Alliance program award-winning organization described use of Baldrige as a key advantage for resilience: "The setup of the Baldrige framework positioned us so we could be resilient." The city manager of a Baldrige Award winner described the

framework-driven focus on innovation as "creating a culture of innovation." The Baldrige

Performance Excellence Program (2021) extends and conveys the optimal climate for innovation

and success as a supportive environment and a process to identify opportunities.

Key Themes

Our investigation included a cross section of operational sectors representing the landscape (see

Figure 1) to ensure the results of the study would be of interest to a broad audience. As we

derived codes for this study from interview data, 16 themes emerged (see Table 1). Some themes

were particularly important as a result of their frequency and depth, and because they subsumed

several other themes.

Table 1

Themes Emerging From Data Analysis

Emergent theme	% of participants describing this theme
Embed Baldrige/culture	94
Strategic planning	88
Leadership	81
Metrics, measurement, and analysis	69
Processes	63
Focus on what is important in the criteria	63
Valuing people	56
Sticking with it/accountability	56
Systems approach/integrated framework	56
Agility	50
Performance-based high expectations	44
Collaborations/partnerships/team approach	44
Stakeholder engagement/feedback	44
Learning/sharing	38
Innovation	31
Comparative data/benchmarking	19

Embed Baldrige/Culture

Across sectors, nearly all interview participants spoke of their adoption of the "Baldrige culture" and of embedding it within their organizations. Demonstrating resiliency, they were then well prepared and positioned to function with little disruption when the COVID-19 pandemic took

hold because they had resources (human, infrastructure, and material) in place and had tested

their contingency plans. Baldrige Award recipient leaders interviewed spoke of the usefulness of

the Baldrige framework (see Baldrige Performance Excellence Program, 2021) and its

applicability across sectors as having helped instill a focus and discipline that encouraged them

to seek excellence. For those who wanted their organizations to be the best and were comparing

themselves against top performers, this approach involved looking at crucial metrics for the

strategic plan, incorporating that information, and improving their processes. Ultimately, a

Baldrige culture prompts provoking thoughts and questions regarding what the organization is

doing, why it is doing certain things, and how it is seeking opportunities for improvement (Holm

et al., 2020).

A recurring question among research participants and their colleagues was "why Baldrige?" An

initial response was typically "well, let's see if there is something better." Invariably, the focus

returned to Baldrige because leaders of Baldrige framework-using organizations could not find a

more effective, efficient framework for the business excellence model that holistically examined

their entire ecosystem and would eventually win over those uncertain that Baldrige was the way

to go. The leader of an organization that has won multiple Baldrige Awards stated that he had

"woefully underestimated" how Baldrige would impact the organization's culture. He noted that

the organization has been forever changed, in a good way, and that the organization is enduring,

prosperous, and thriving.

The structure of the Baldrige framework and rigor of a Baldrige assessment (Bandyopadhyay &

Leonard, 2016) have been helpful to organizations because they have taught them to embrace the

change they see in the world, including how that change could impact their operations, their people, their mission, their vision, and how they do their work. One interview participant said "as a Baldrige organization, we were immediately alerted to the change the pandemic brought to how our work is done. We knew right away that this was something we needed to work on." In addition, a business leader noted that "the criteria are baked into how we do everything, and it keeps us awake all the time as to what is changing in the world."

Strategic Planning

Before implementing the Baldrige framework, some organizations operated primarily in silos, while others were using aspects of the Baldrige framework but did not realize it; after Baldrige implementation, because of the systematic approach, organizational leaders began to plan and budget strategically and seek alignment across their enterprise instead of focusing on their department or division. This process started an evolution toward ownership, a level of engagement that was so robust and positive that it brought champions aboard at the top level and within the larger community. Strategic planning and continuity planning seemed to go hand in hand for all of the interview participants in the current study, with most adding that they subscribe to a short-term 1-year strategic plan and long-term plans of 5, 10, or perhaps 20 or more years. Leaders emphasized that their long-term plans do not sit collecting dust, but instead are reviewed quarterly or at least annually for relevance and are adjusted as needed to ensure that they are on track to deliver outcomes.

Research participants emphasized that they deemed strategic planning to be key to organizational sustainability and that their organizations' strategic planning had evolved since its inception to

the point where, even during the height of the COVID-19 crisis, strategic plans held up because leaders were continuously evaluating and evolving their strategies. In particular, the use of the assessment tools and processes of the Baldrige framework yielded insights for the organizations in recognizing and addressing areas for improvement and making disciplined decisions regarding opportunities and threats to their sustainability and resilience. Strategic planning was the catalyst that was used to break down internal barriers and silos and to encourage the organization's team to work together and appreciate how the entire system is supposed to work. Top-level executive support is excellent, but lower level support is even better, the interviewed leaders indicated: Once the small wins were achieved, the value of Baldrige was an easy sell, even to the general public. Furthermore, when leaders' strategic planning process had matured, some leaders engaged in strategic scenario planning, examining different factors to support sustainability and resilience.

Leadership

Leadership, one of the pillars of the Baldrige framework, was deemed critical by the Baldrige Award-winning organization leaders, particularly leadership that is stable and consistent. Leadership can, in a vacuum, apply the Baldrige principles to the organization; however, the resounding lesson learned by the Baldrige framework-using leaders represented in the current study was that implementing the Baldrige framework is best accomplished through participatory and inclusive processes that engage all members of the organization. Equally important was the support of a committed leadership team and senior executives, if possible. Of note was the importance of engaging good people—the right people—who demonstrated a shared fundamental goal to pursue excellence, were willing to embark on the Baldrige journey, and, in

the process, changed the culture to an aspirational one, which was essential to organizational

sustainability and resilience.

Leaders of Baldrige Award-winning organizations stated that executive leadership support,

alignment, and commitment are necessary for successfully applying the Baldrige framework.

The framework's concept of visionary leadership led some to recognize the importance of

community as a system to achieve sustainability and resilience. The collective effort and impact

of setting of an agenda, participating in activities with partners, and communicating through

various channels reinforced the community systems perspective. A successful organization is

steeped in leadership education and feedback (Rice, 2017), recognizing that the individual is an

integral part of the system (Tortorella et al., 2021) and should not be left out of the evaluation

and feedback loop. One organization had to furlough some employees, and perhaps the biggest

challenge for its leadership was communicating regularly with its furloughed workforce

members until they were able to rejoin the workforce. Doing so in a humanistic way was aided

by the established sense of community.

Metrics, Measurement, and Analysis

Leaders stated that the Baldrige framework provided the checkpoints over time to guide

continuous improvement and strategies. Leaders indicated that although other improvement

programs and tools had come and gone, outcome measures helped these Baldrige leaders

determine whether they were on course or needed to correct their strategic plans. One of the most

significant opportunities realized by leaders of organizations using the Baldrige framework was

aligning the performance outcomes of everything they did with the organization's strategy. The

Baldrige framework helped them achieve a systems-based approach and drove change centered on resiliency and sustainability, exemplified by intentional planning. During the height of the COVID-19 pandemic, many leaders interviewed credited the Baldrige framework with having helped them perform better, as evidenced by performance outcomes, including survey feedback and communication with their communities. Planning and stewardship became priorities for some leaders in this study because their organizations had a duty to sustain business continuity for the sake of the communities they served.

Metrics, measurements, and analysis are key components of the continuous improvement process (Chadha, 2017), as evidenced by use across all sectors represented in this study. Some leaders of Baldrige framework-using organizations have key performance indicators embedded in their strategic planning and centered on high-performance culture, member loyalty, and financial stability. Other leaders stated that they have metrics on everything and are heavily involved in the trending and analysis of those vital signs daily, weekly, annually, or based on other cycles. In short, the leaders examined the key metrics of their organization's strategic plan and used that information to improve work processes. Further, the leaders of Baldrige framework-using organizations stated that although "having the right people with the ability to do the job" was a challenge, it was markedly easier to use the holistic Baldrige framework to show how various business functions worked together by augmenting rather than replacing other business excellence programs (such as Six Sigma and 8D problem solving).

To support sustainability and resilience, some leaders transparently share operating financial information with all staff members. Over time, as some of the organizations experienced success,

the leaders have shared the fruits of their labor in terms of operating margin data. Further, use of

various communication channels to communicate with the workforce the organization's top

priorities, performance and quality safety metrics, and finance metrics has helped support

organizational sustainability and resilience from an operational, financial, and process

perspective. Business leaders reported that processes based on the Baldrige framework permitted

them to navigate through each layer of the organizational structure and evaluate performance

metrics, tactics, and overarching strategies.

Business leaders interviewed also stated that organizations must be intentional in what they

choose to measure, essentially measuring what matters and acting on that information to effect

positive, meaningful improvements. Comparative data and benchmarking or measuring up

(Bandyopadhyay & Leonard, 2016; Idowu, 2017) against successful peers requires asking

provoking questions, such as "Who out there is engaged in this work? Whose success is

replicable? How do our performance outcomes compare? Let's make sure we are not comparing

against the average in the marketplace, but comparing against the best in class." The Baldrige

criteria require organizational leaders to hone their measures (Menezes et al., 2018), understand

where they are and where they want to be, plan for that, and lead the organization in that quest.

Furthermore, by applying the common language of the Baldrige framework, organizations can

learn from others outside their competitive sector whether there are no comparable entities in

their sector or little available data.

Leaders of Baldrige Award-winning organizations indicated that they have embedded Baldrige

measurement and analysis processes throughout their organization, have followed strategic plans,

have examined data, and have ensured that they have delivered on their outcomes. Across all sectors, leaders affirmed that the Baldrige framework has become the one thing to focus on; they indicated that they learned how to use data to set major objectives that were scalable and could carry the organization forward sustainably. The choice was to use the Baldrige framework or do nothing. One interview participant asked, "If not Baldrige, then what?"

Processes

It came as no surprise that the importance of processes resounded across all sectors of this study. Some organizations initially identified their processes using an internal epithet instead of describing an approach as a "Baldrige thing." Many organizational leaders agreed that embedding processes throughout the organization is the most effective way to define processes, establish areas for improvement, and track progress against goals. Leaders viewed workforce support and training as key components of organizational sustainability and resilience, particularly when organizations progressed through training and development to arrive at having the right people working together with well-defined processes to tackle the root causes of problems. Through the use of defined processes in the Baldrige framework, leaders have helped to "align the arrows" by facilitating the development of a shared understanding of goals, processes, and results within the organizations.

For some leaders of Baldrige Award-winning organizations represented in this study, process orientation was vital, and using a systems approach to initiatives helped ensure that everyone knew the initiatives for which they were accountable. These leaders have employed innovation to create new programs, communicate results, and help ensure that everyone is accountable for

results. They have integrated processes throughout the organization, including debriefing to assess internal effectiveness as a team and discussing what went well, what did not go well, and what needed to change by implementing refined processes and strategies. The use of surveys to measure results from the community perspective was beneficial.

For some leaders of Baldrige Award-winning organizations, an initial hurdle was to announce to workforce members that they had to spend a significant amount of time documenting processes and testing. Everything worked out well once they got past that, the leaders indicated, especially when people knew the leadership was supportive and serious about undertaking the Baldrige journey. In time, people fell in line and realized the importance of it. One leader said, "It is much harder to start from ground zero or at least the first floor than it is to tweak a best-in-class program." A shared experience among organization leaders was that people first looked at the Baldrige framework as a theoretical exercise, but once they started to apply it to a real-world situation, it became real to them, especially during the pandemic.

Sticking With It/Accountability

For many organizations represented in this study, the Baldrige journey was not an easy one. Using the Baldrige framework may present stumbling blocks: It looks pretty rigorous, and it can be costly; however, with time and Baldrige expertise, the organizations represented in this study have been able to apply the framework successfully and win Baldrige recognition (more than once for some). Some leaders noted that the Baldrige criteria term *key* (see Baldrige Performance Excellence Program, 2021) was not particularly helpful and was somewhat ambiguous. However, others mentioned that because the Baldrige criteria are not overly prescriptive, the

language offered them freedom for interpretation. Some leaders said that applying the Baldrige framework initially induced some frustration in attempting to address every criterion until they realized that not everything necessarily applied to their organization. Despite the ambiguity that some organizations experienced at the beginning of their Baldrige journey, the leaders of these organizations soon learned what elements were effective in supporting sustainability and resilience. Additionally, the initially time-consuming and heavy-lifting effort was found to be somewhat tedious and further added to the challenge of engaging stakeholders and seeing the value of Baldrige; however, over time, use of the Baldrige criteria mobilized everyone and reminded them of what they do and why they do it.

Leaders of Baldrige organizations have learned from repeated success that approaches to implementing the Baldrige framework cannot be "one and done." Some leaders said that, early on in their organization's Baldrige journey, they were skeptical because Baldrige is process oriented; however, they came to see how it worked over time. They came to believe in the rigor—wash, rinse, repeat—and found that they kept discovering new things. One leader said, "there IS something new under the sun every year." During the pandemic, some of the organizational leaders indicated that they were being resilient by making people safe, giving back premium dollars, and encountering few barriers due to following leading-edge, validated best practices of the Baldrige framework.

The leaders found more than one way to ensure accountability. Cascading evaluations were rolled out by one leader interviewed: As part of the organization's strategic plan, the initiative holds the workforce accountable for the work through monthly report-outs, weekly briefings to

the board, and quarterly reports—with individuals at different levels taking turns to report out. For example, the executive level owns the final work product, which cascades down to C-suite leaders and eventually through successive levels so that when each reporter evaluates/reflects on their level's progress, they have to align the work and ensure accountability throughout the system. In another organization, leaders hold people accountable for their initiatives and work to overcome barriers related to having the right people in the right places. In that organization, ongoing evaluations include regularly reviewing data, quickly addressing things that are going wrong, and adjusting as necessary. Leaders of that organization also use continuous monitoring of the outcomes and communicate those outcomes out to all of the stakeholders. As part of the learning and improving process, leaders also share best practices, work collaboratively, and publicly post outcomes. Leaders have built a culture of accountability by creating a supportive—not punitive—environment.

Agility

To promote organizational sustainability and resilience, leaders indicated that they executed a strategy of agility based on a well-documented and tested continuity plan that was developed and refined through testing and simulated exercises, after-action reports, and continuous learning processes that helped them adjust and improve their processes. The leaders' responses affirmed the importance of strategy in enabling them to know what is important to continue doing for customers, employees, and communities. Forecasting was an essential component of the strategic planning process that prepared leaders of these Baldrige Award-winning organizations to be aware of blind spots, take intelligent risks, and improve accordingly.

Systematic processes were also instrumental in the ability of these organizations to pivot quickly, particularly in aligning with their leadership on what is important to the organization in terms of its vision, mission, customers, strategic advantages/challenges, and competitive position. Leaders interviewed credited the Baldrige framework with helping their award-winning organizations prioritize projects, plan for growth, and implement new programs; additionally, leaders indicated that educating the workforce has yielded great success in terms of organizational resiliency and sustainability. As a result, these Baldrige Award-winning organizations have evolved to the point where strategic planning has become intentional, bringing clarity to the difference between process and one-off projects and the realization that the latter do not lead to sustainability. More importantly, deploying strategy through working groups with specific priorities has led to great outcomes, partnerships, and connections, reinforcing the organizations' need to document all key processes to continue improving and building on their successes. When COVID-19 hit, several leaders of Baldrige framework-using organizations had systems and programs in place and could quickly pivot to online delivery and operating in a world of virtual communications.

Performance-Based High Expectations

An organizational focus on using the Baldrige framework and trusting that process while focusing on the work sets the stage for organizational resiliency and sustainability. A performance-based culture (Idowu, 2017) with high performance expectations for team players encourages a focus on and promotion of teamwork and collaboration that positively impacts organizations. Leaders interviewed credited their use of the Baldrige framework with allowing their organizations to focus on key factors and helping them eliminate "the noise" so they could be successful for the communities they serve.

One leader stated that "sustainability and resilience are really hard to manage because, when you step back and think about resilience, it is not the resilience of one person but of everyone in the organization and the community at large that matters." Another leader described implementing a peer support program among employees, volunteers, and anyone else in the community with an issue or problem so that they could call and be matched with someone to provide them with help confidentially. One leader of an organization that earned a Baldrige Award during the COVID-19 pandemic noted that peer support spoke volumes to the resiliency and sustainability of the organization and to the resilience of the Baldrige framework. Another leader stated that they sought to keep it (Baldrige) very simple by deliberately having only three strategic goals to create a sense of alignment from the beginning to the middle to the end. That leader believes that if people truly understand how their work contributes to the organization, customers, and community, they will not be isolated or disconnected when people leave or when crises such as pandemics occur.

Collaborations/Partnerships/Team Approach

Several business leaders stated that, at a high level, if an organization applies the Baldrige criteria, it will drive the organization toward sustainability and resilience. Another business leader added that Baldrige supports sustainability, and the addition of cybersecurity to the framework aided their organization in setting up multifactor authentication and other processes to sustain cybersecurity and be resilient against cyberattacks. Ultimately, leaders have found that building relationships with employees, customers, and the community is key to sustainability and resilience through partnerships. Some organization leaders have taken that concept further and

plan to publish an impact report every year to highlight how, through collaboration and partnerships, they can help their communities be stronger and more resilient.

Stakeholder Engagement/Feedback

Some leaders interviewed said that the Baldrige framework helped their organizations to change workflow protocols and solidify operations from executive staff members to the front line. How did they know it worked? Shortage of resources was a persistent challenge, as was ensuring the bandwidth to do more with less, so the leaders had to prioritize their projects and the life cycle of each project from an operations perspective. Many of these Baldrige framework-using organizations received feedback by listening to the voice of the customer and forming an advisory committee to reach a consensus with employees on how to best approach projects in terms of priority. Additionally, those leaders employed Baldrige feedback to determine improvement opportunities. The framework became the focus to help ensure use of data to plan major objectives. From the perspective of those leaders, relying on Baldrige was a leap-of-faith concept bolstered by an increase in the velocity of communication to close gaps and achieve operational excellence.

Learning/Sharing

Leadership is also about listening, and the leaders of one Baldrige Award-winning organization praised the feedback report they received from the Baldrige examiners following their initial site visit. The leaders considered the feedback report, although long and presenting daunting opportunities for improvement (OFIs), to be critical to their success, particularly the OFIs. Although leaders could not tackle the OFIs all at once, the OFIs forced them to determine what

was best for them strategically and to recognize that they were not providing the appropriate level of attention to those areas, nor were they aligning those areas to their business community and volunteers. Today, the leaders of this organization proudly state that their volunteer program is among the best and has received accreditation, as have all their other business units.

Innovation

Innovation and adapting to the market (see Standing et al., 2018) spurred one organization to derive a return-on-investment structure that could be tested, understood, and used to justify costs. Moreover, although some leaders of Baldrige Award-winning organizations employed innovation to create new processes and programs, others allowed key performance indicators to go out of band to make improvements, believing in the value of taking intelligent risks because doing so would allow greater capacity for innovation.

Conclusion

The primary message of this paper is that leaders who use the Baldrige framework and criteria to inform and guide operations and improve results achieve organizational sustainability and resilience. Leaders who embrace the bold goal of attaining award-winning performance excellence lead their organizations in various approaches to embedding Baldrige in organizational culture. These leaders use systematic strategic planning to drive accountability for high performance based on pervasive and cascading metrics. They are deeply involved in the trending and analysis of those vital signs daily, weekly, annually, and more, depending on performance cycles. Importantly, these leaders stick with it; that is, notwithstanding the initially time-consuming and heavy-lifting effort of implementing the Baldrige framework and criteria,

over time, use of the Baldrige criteria mobilizes everyone and reminds them of what they do and why they do it. Based on multiple successes, leaders have learned that implementing the Baldrige framework cannot be "one and done." Leaders have also learned the gift of feedback and approaches to learning and sharing that engage all stakeholders. The use of the Baldrige Performance Excellence Program's framework and criteria demonstrates that, ultimately, achieving organizational sustainability and resilience depends upon not the resilience of individuals but upon the resilience of everyone in the organization and the community.

References

Baldrige Performance Excellence Program. (2021). *2021-2022 Baldrige excellence framework: A systems approach to improving your organization's performance*. U. S. Department of Commerce, National Institute of Standards and Technology. https://www.nist.gov/baldrige

Bandyopadhyay, P. K., & Leonard, D. (2016). The value of using the Baldrige performance excellence framework in manufacturing organizations. *Journal for Quality and Participation*, *39*(3), 10–14.

Birch-Jensen, A., Gremyr, I., & Halldórsson, A. (2020). Digitally connected services: Improvements through customer-initiated feedback. *European Management Journal*, *38*(5), 814–325. https://doi.org/10.1016/j.emj.2020.03.008

Chadha, R. (2017). Value through continuous improvement. *FAIMA Business & Management Journal*, *5*(1), 40–51.

Curry, L. A., Nembhard, I. M., & Bradley, E. H. (2009). Qualitative and mixed methods provide unique contributions to outcomes research. *Circulation*, *119*(10), 1442–1452. https://doi.org/10.1161/CIRCULATIONAHA.107.742775

Di Pietro, L., Mugion, R., & Renzi, M. (2013). An integrated approach between lean and customer feedback tools: An empirical study in the public sector. *Total Quality Management & Business Excellence*, *24*(7/8), 899–917. https://doi.org/10.1080/14783363.2013.791106

Evert de Haan, P. C., & Verhoef, T. W. (2015). The predictive ability of different customer feedback metrics for retention. *International Journal of Research in Marketing*, *32*(2), 195–206. https://doi.org/10.1016/j.ijresmar.2015.02.004

Holm, D. B., Drogendijk, R., & ul Haq, H. (2020). An attention-based view on managing information processing channels in organizations. *Scandinavian Journal of Management*, *36*(2020), 1–10. https://doi.org/10.1016/j.scaman.2020.101106

Idowu, A. (2017). Effectiveness of performance appraisal system and its effect on employee motivation. *Nile Journal of Business and Economics*, *3*(5), 15–39. https://doi.org/10.20321/nilejbe.v3i5.88

Jankalová, M., & Jankal, R. (2020). How to characterize business excellence and determine the relation between business excellence and sustainability. *EconPapers*, *12*(15), 1–25. https://doi.org/10.3390/su12156198

Menezes, P. H., Martins, H. C., & Oliveira, R. R. (2018). The excellence Baldrige criteria in the effectiveness of higher education institutions management. *Brazilian Business Review*, *15*, 47–67. https://doi.org/10.15728/bbr.2018.15.1.4

Nawaz, S. (2021, September 7). 5 reasons your employees don't understand your company's vision. *Harvard Business Review*. https://hbr.org/2021/09/5-reasons-your-employees-dont-understand-your-companys-vision

Ose, S. O. (2016). Using Excel and Word to structure qualitative data. *Journal of Applied Social Sciences*, *10*(2), 147–162. https://doi.org/10.1177/1936724416664948

Rice, B. (2017). Feedforward or feedback–reframing positive performance management. *Human Resource Management International Digest*, *25*(5), 7–9. https://doi.org/10.1108/HRMID-04-2017-0060

Saurin, T. A. (2021). A complexity thinking account of the COVID-19 pandemic: Implications for system-oriented safety management. *Safety Science*, *134*, 1–8. https://doi.org/10.1016/j.ssci.2020.105087

Standing, C., Mavi, R. K., Suseno, Y., & Jackson, P. (2018). Does openness improve national innovation? An application to OECD countries. *Systems Research & Behavioral Science*, *35*(6), 619–631. https://doi.org/10.1002/sres.2506

Tortorella, G. L., Fogliatto, F. S., Vergara, A., Quelhas, O. L., & Sawhney, R. (2021). Influence of team members' characteristics on the sustainability of continuous improvement initiatives. *Total Quality Management & Business Excellence*, *32*(7/8), 852–868. https://doi.org/10.1080/14783363.2019.1641077

Tushman, M. L., Kahn, A., Porray, M. E., & Binns, A. (2017, October 23). Change management is becoming increasingly data-driven: Companies aren't ready. *Harvard Business Review Digital Articles*, 2–5.

Valentinov, V., Roth, S., & Pies, I. (2021). Social goals in the theory of the firm: A systems theory view. *Administration & Society*, *53*(2), 273–304. https://doi.org/10.1177/0095399720933826

Wheelan, C. (2018, October 26). To get your team to use data, demystify it. *Harvard Business Review Digital Articles*, 2–5.