Baldrige National Quality Program

2010

NuGrain Laboratories Case Study Packet

Executive Summary

Baldrige National Quality Program National Institute of Standards and Technology • Department of Commerce

2010

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The NuGrain Laboratories Case Study is a fictional Baldrige Award application prepared for use in the 2010 Malcolm Baldrige National Quality Award Examiner Preparation Course. This case study describes a fictitious government-owned, contractor-operated research laboratory. There is no connection between the fictitious NuGrain Laboratories and any other organization, either named NuGrain Laboratories or otherwise. Other organizations cited in the case study also are fictitious, except for several national and government organizations.

Because the primary purpose of the case study is to provide learning opportunities for training Baldrige Examiners and others, there are areas in the case study where Criteria requirements purposely are not addressed. While this fictional application therefore may not demonstrate role-model responses in all Criteria areas, it illustrates the format and general content of an Award application. This case study is based on the 2009–2010 Criteria for Performance Excellence. Please refer to the NuGrain Laboratories Scorebook and NuGrain Laboratories Feedback Report to see the case study's strengths and opportunities for improvement.

NuGrain Laboratories scored in band 5 for both Process and Results Items. An organization in band 5 for Process Items typically demonstrates effective, systematic, well-deployed approaches responsive to the overall requirements of most Criteria Items. The organization demonstrates a fact-based, systematic evaluation and improvement process and organizational learning, including innovation, that result in improving the effectiveness and efficiency of key processes. For an organization that scores in band 5 for Results Items, results typically address most key customer/stakeholder, market, and process requirements, and they demonstrate areas of strength against relevant comparisons and/or benchmarks. Improvement trends and/or good performance are reported for most areas of importance to the Criteria requirements and the accomplishment of the organization's mission. Performance projections for some high-priority areas are reported.

Organizational Snapshot

NuGrain Laboratories National Center for Strategic Agricultural Research (NuGrain) is a government-owned, contractor-operated strategic research organization managed by Nebraska Free University (NFU). It is headquartered in Kearney, Nebraska, in facilities owned by the U.S. Department of Agriculture (USDA), with additional research facilities at three distinct U.S. geographic sites. NuGrain provides unique research and development for the USDA through a variety of projects representing "cradle-to-grave" research of corn and wheat products. Its main products consist of a Strategic Research Plan, research and related publications, commercialization pathways (licenses), and an agricultural research capability to support the needs of the United States. The major market served consists of U.S. farmers and food processing organizations.

In its application, NuGrain puts a particular focus on the difference between its work processes and work systems, as well as on its core competencies as a research organization. As it is managed and operated by NFU, NuGrain also emphasizes contract management and its organizational ties to federal government agencies. Societal responsibility and serving the public as a government-owned laboratory are also central to its mission, vision, and values.

Strategic challenges include an uncertain funding environment (e.g., the possibility that the USDA could lose funds, NFU could lose the contract, and/or national research priorities could change); competition with other contractors (universities and industry); the high cost of entry into new research programs; changing contract performance requirements and conflicts between industry and government; the declining number of agriculture graduates; and the high expense of new technologies for farmers.

Use of a Case Study Packet

Baldrige case study packets, which are available on the Baldrige Web site in electronic format (e-format), are composed of the tools used to train Baldrige Examiners and the Examiners' working documents in the evaluation process. As such, the packets demonstrate the Baldrige Award application and evaluation processes and provide insight into the Criteria on which evaluations are based. A case study packet includes information relating to scoring, Criteria responses, and examination processes and illustrates the format for an application. In addition to Examiners and Award applicants, state and local Baldrige-based award programs across the United States and the internal award programs of many organizations make use of case study materials. Countries around the world have also used the documents in creating their Baldrige-based award programs. The self-assessment and self-improvement applications of the case study packets are without limit. In addition, the use of the materials in this packet strengthens the outreach efforts of the Baldrige community.

Case Study Packet Documents

This Executive Summary and the documents described below constitute the 2010 Case Study Packet. The packet is used in conjunction with the 2009–2010 Criteria for Performance Excellence to illustrate a 2010 Malcolm Baldrige National Quality Award application and the processes used to evaluate it. As the Criteria and the Malcolm Baldrige National Quality Award processes undergo change biennially, this case study packet may not be directly comparable with future editions of the Criteria.

The NuGrain Laboratories Case Study

The NuGrain Laboratories Case Study is a sample application written about a fictitious government-owned, contractor-operated research laboratory applying for the Baldrige Award. It demonstrates the form and general content of an application, providing information requested in the seven Categories of the Criteria for Performance Excellence. Responses are presented for each of the 18 Items, which comprise 36 separate Areas to Address. The NuGrain Laboratories Case Study was an important part of the 2010 Examiner Preparation Course. Because the case study was developed as a learning tool to train Baldrige Examiners and others, including state and local Baldrige-based programs and organizations that use it internally, the case study intentionally does not fully address all Criteria requirements.

The NuGrain Laboratories Scorebook

The NuGrain Laboratories Scorebook contains comments and scores for each of the 18 Items of the application. The recommended scoring ranges for the NuGrain Laboratories Case Study shown at the beginning of the scorebook represent the opinion of one Examiner team; these are not meant to be definitive scores. For an actual application, the Panel of Judges uses information from the Examiners' scores to determine if the applicant should advance to the next stage of the review process. Scorebooks represent the work of Examiners; they are converted into feedback reports, which are sent to all organizations that apply for the Award. Details of the review process are included as an appendix in the NuGrain Laboratories Feedback Report.

The NuGrain Laboratories Feedback Report

The NuGrain Laboratories Feedback Report is an example of the written assessment that all Award applicants receive in response to their applications. Prepared by members of the Board of Examiners, a feedback report is based on the written application, comments and scores, and the results of a site visit, if any. The feedback report summarizes the key themes of the application evaluation, identifies the two bands of an applicant's total scores (i.e., one scoring band for Process Items and one for Results Items), identifies a percentage range for each Criteria Item, and lists strengths and opportunities for improvement. It is intended to report the findings of the Examiners and should not be prescriptive in nature.

Baldrige Educational Materials

Criteria for Performance Excellence

To receive up to five free copies of the 2009–2010 Criteria for Performance Excellence booklet, the 2009–2010 Education Criteria for Performance Excellence booklet, or the 2009–2010 Health Care Criteria for Performance Excellence booklet, contact the Baldrige National Quality Program (see contact information on the last page/back cover of this Executive Summary).

To order bulk copies of the Criteria, contact the American Society for Quality (see ordering information on the last page of this Executive Summary). The fee is \$39.95 per packet of 10, plus shipping and handling.

The item numbers for ordering bulk copies follow.

2009–2010 Criteria for Performance Excellence (referred to as the Business/Nonprofit Criteria)—Item Number T1525

2009–2010 Education Criteria for Performance Excellence—Item Number T1526

2009–2010 Health Care Criteria for Performance Excellence—Item Number T1524

DVDs of Award Recipients

DVDs of Award recipients are a valuable resource for gaining a better understanding of performance excellence and quality achievement. The DVDs include highlights from the annual Award Ceremony and interviews with representatives from the Award recipient organizations. DVDs are available from ASQ for each Award year since 2005.

Case Studies

Case study packets are available in e-format (PDF) at the Web addresses shown below.

2010 Case Study Packet: NuGrain Laboratories (a research laboratory) <u>http://www.nist.gov/baldrige/publications/nugrain.cfm</u>

2009 Case Study Packet: Nightingale College of Nursing (a nursing school) http://www.nist.gov/baldrige/publications/nightingale_college.cfm

2008 Case Study Packet: Novel Connect (a manufacturing organization) http://www.nist.gov/baldrige/publications/novel_connect.cfm

2007 Case Study Packet: Share Food (a nonprofit food bank)

http://www.nist.gov/baldrige/publications/archive/share_food.cfm

2006 Case Study Packet: Arroyo Fresco Community Health Center (a nonprofit health care center)

http://www.nist.gov/baldrige/publications/archive/arroyo.cfm

2005 Case Study Packet: Landmark Dining, Inc. (a small business organization) http://www.nist.gov/baldrige/publications/archive/landmark.cfm

2004 Case Study Packet: Sandy Hill School District (an education organization) http://www.nist.gov/baldrige/publications/archive/sandy_hill.cfm

2003 Case Study Packet: GeoOrb Polymers, North America (a manufacturing organization)

http://www.nist.gov/baldrige/publications/archive/geo_orb.cfm

2002 Case Study Packet: CapStar Health System (a nonprofit health care system) http://www.nist.gov/baldrige/publications/archive/capstar.cfm

2001 Case Study Packet: TriView National Bank (a financial services organization) http://www.nist.gov/baldrige/publications/archive/tri_view.cfm

2000 Case Study Packet: Coyote Community College (an education organization) http://www.nist.gov/baldrige/publications/archive/coyote.cfm

Baldrige National Quality Program

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The National Institute of Standards and Technology (NIST), an agency of the U.S. Department of Commerce, manages the Baldrige National Quality Program (BNQP). For more than a century, NIST has helped to lay the foundation for the innovation, economic growth, and quality of life that Americans have come to expect. NIST promotes U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life. Through a network of nearly 400 assistance centers that serve all 50 states and Puerto Rico, NIST provides technical and business assistance to help smaller manufacturers overcome barriers to productivity and competitiveness.

Call BNQP or visit our Web site for

- information on improving the performance of your organization
- information on eligibility requirements for the Baldrige Award
- information on applying for the Baldrige Award
- information on becoming a Baldrige Examiner
- information on the Baldrige Award recipients
- individual copies of the Criteria for Performance Excellence—Business/Nonprofit, Education, and Health Care
- information on BNQP educational materials
- case studies

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By making quality a global priority, an organizational imperative, and a personal ethic, the American Society for Quality (ASQ) becomes the community for all who seek quality technology, concepts, or tools to improve themselves and their world. ASQ administers the Malcolm Baldrige National Quality Award under contract to NIST.

Call ASQ to order

- bulk copies of the Criteria
- Award recipients DVD

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